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METROTEL

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ISSUE 4 • 1986

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by Greg Jones. Telecom Graphic
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Mission for God — Wesley Central Mission.

EASY GUIDE

SWITCH ON

Turn your equipment on, making sure that all plugs are firmly pushed in, and that your telephone connection is plugged in.

DIAL

If your set has auto-dialling, key the code for Viatel and the set will dial the number for you. Otherwise, key in 01955 and await connection.

CONNECTION TO VIATEL

You may hear a clicking sound as your equipment dials and shortly afterwards a high pitched whistle. If your set is suitably equipped and programmed it will automatically enter your Customer Identity once you are connected to Viatel. If not, key it in carefully yourself when requested by Viatel. Enter your Personal Password when it is requested and wait for the Viatel Welcome Frame to appear on the screen.

LOOKING FOR INFORMATION Through Viatel itself

1. Keying through index choices: *0 #

Starting with the Viatel Main Index, you can simply follow the choices listed on each page, working towards more and more specific information.

2. Using the Viatel Alphabetical Subject index: *13 #

An extensive alphabetical list to subjects is maintained on Viatel. You can find the name of the subject you want in a few simple steps and then key one or two numbers to go directly from there to the index page for information on that subject.

3. Using the Viatel Service Provider index: *13 #

This enables you to find the name of the Service Provider in an alphabetical list, and then go directly to that Service Provider's "front page".

Through the Printed Directory

The Viatel Printed Directory also contains alphabetical lists to subjects and to Service Providers. It cannot be up-dated as quickly as the on-screen Viatel indexes, but more detailed

EASY GUIDE

information can be provided, and it enables you to quickly find the right page number for the subject or Service Provider you want to find.

RETURNING TO MAIN INDEX

*0 #

Use this if you wish to return to the Viatel Main Index.

TO LEAVE VIATEL

*90 #

If there are new messages for you this page will tell you. If not, your call to Viatel will end.

RETURNING TO PREVIOUS FRAME

* #

May be used up to 3 times in succession on any one occasion.
NOTE: You will have to pay any frame charges again.

REPEATING A FRAME

*00

This repeats the frame without any changes or updates. Use this feature if the page is disrupted by interference on the line.
No charge is made.

*09

Repeats the frame with any new updates or changes. If applicable, frame charges will be made.

KEYING CORRECTION

* *

This procedure clears any wrongly keyed number, and will allow you to rekey.

CHECKING YOUR BILL (Current usage Charge)

*92 #

This page tells you the cost of the current call and any other made to Viatel during the current month.

CONTACTING VIATEL

*1052 #

If you wish to send a message to Viatel.

MAILBOX

*103 #

To send messages to other Viatel customers.

For a detailed description of Using Viatel, please refer to pages **75-79** in this Directory or to the coloured instruction Cards in your Welcome Kit.

Welcome to the second year of Viatel and the fourth issue of the Directory and Magazine. From just over 6,000 copies in February 1985 we've grown to 57,000 copies for this issue! However, this is a special issue and along with our normal distribution of 25,000 copies, the directory and magazine will be included free with the May issue of Australian Personal Computer.

For this issue we have focussed on the personal computer user and Viatel. Apart from our listings of Viatel Service Providers and our regular features, you'll find articles highlighting;

- telesoftware
- what Viatel has on offer for the PC user
- teleshopping in Australia
- the first year of Viatel

We are pleased to receive contributions from customers, Service Providers and equipment suppliers alike. However material submitted for the Viatel magazine should be forwarded on the basis that there is no guarantee of publication. Material should be sent to:

Manager — Viatel Directory and Magazine
Telecom Australia
1st Floor
190 Queen Street
MELBOURNE 3000

ABOUT THIS DIRECTORY

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Leigh Kitching.

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The views expressed in the articles in this publication are the views of the authors and are not necessarily the views of Telecom Australia.



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QPA 3971

* 555 #

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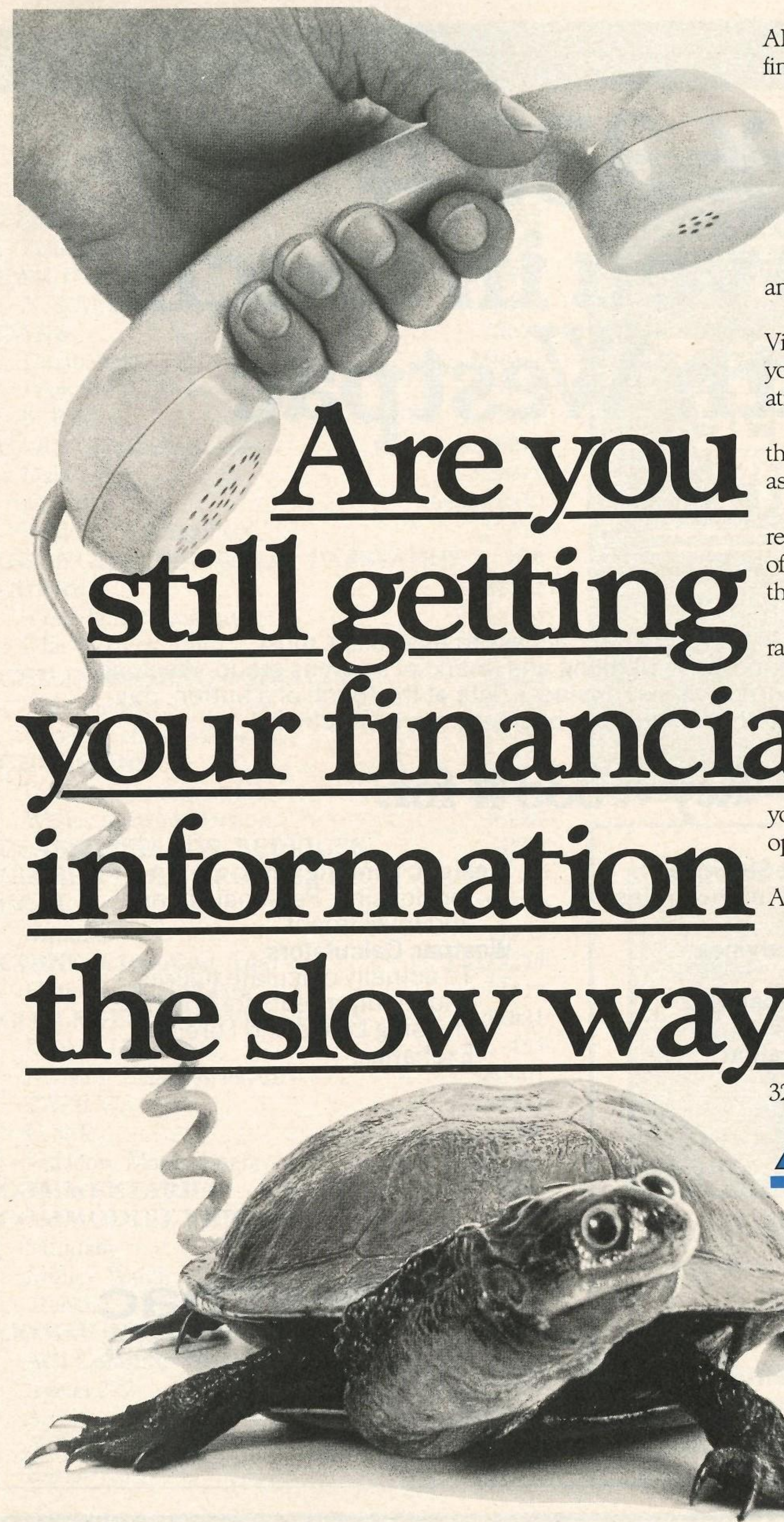
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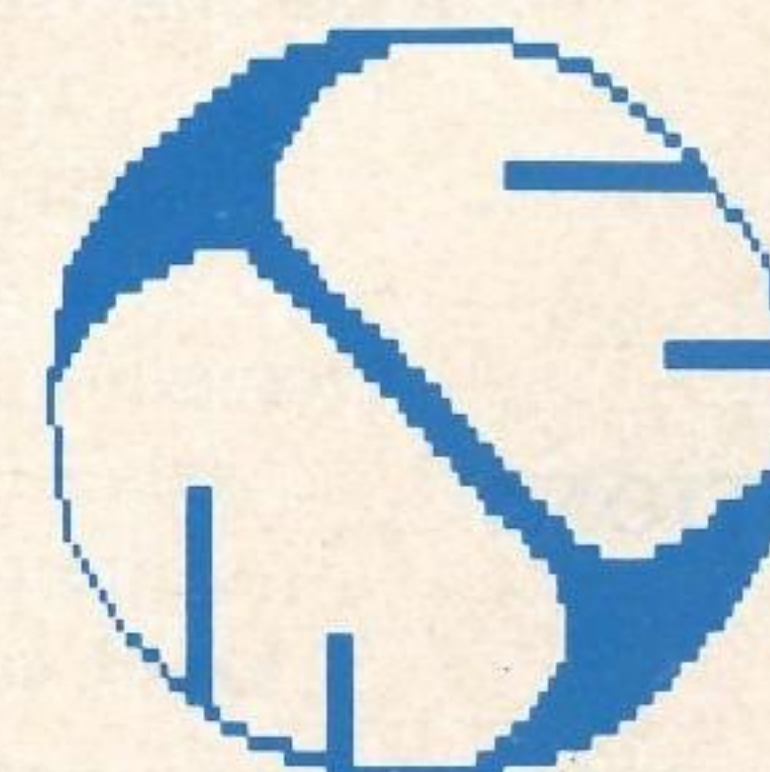
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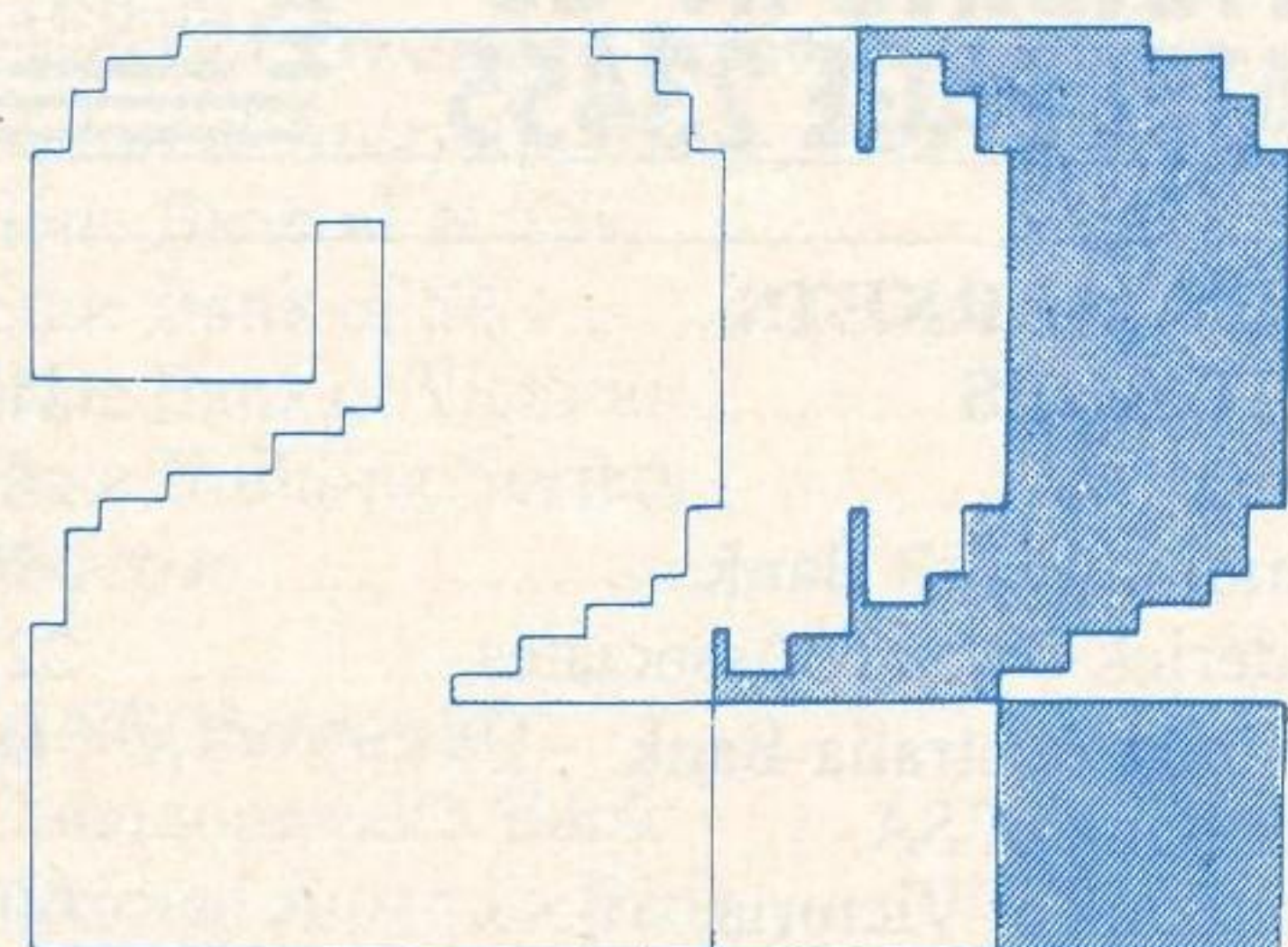
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MAGAZINE

I S S U E 4 - 1 9 8 6

A GOOD FIRST YEAR FOR VIATEL

Lindsay Cunningham
talks to Les Cardilini

VIATEL's progress in its first twelve months of operation has more than pleased its Branch Manager in Australian Telecom, Mr. Lindsay Cunningham. Lindsay believes the progressive improvement in the quality of its data base generally and the range of new services becoming available on Viatel, have been the major reasons behind the success of its introduction here.

**Australia's national
videotex service Viatel,
has attracted over ten
thousand users since its
introduction in
February 1985 and there
are currently about 150
Service Providers on the
system, with some
exciting new services to
come.**

Viatel's success contrasts markedly with that of some less popular public videotex systems around the world which failed to gain effective market penetration and were closed down. Canada and the United States of America were among those countries which had experienced such problems, Lindsay points out.

Data processing and Interaction
The diversity of applications and services on Viatel is enhanced by the new, data processing, Gateway which is used by such highly interactive services as those provided

by the West Australian Totalisator Agency Board and the Trawler Owners' Association of Australia. Introduction to these and the many other facilities available to Viatel users has been encouraged by the popular 'free time' sessions which become available at advertised times on the system.

Free Time On Viatel

During the free time sessions users are not charged Viatel connection time fees and can browse through index frames and services, to acquaint themselves with what is widely available on Viatel. Statistics indicate that up to 200 users have been on the system simultaneously during the free-time sessions. User Interests

Clearly, users' interests divide between what might be described as business and domestic applications. The banking and stocks and finance services are well supported on the one hand and, on the other, the entertainment and leisure services are attracting many users. Personal computer owners in particular are finding the telesoftware services useful and a practical way of building up their software libraries.

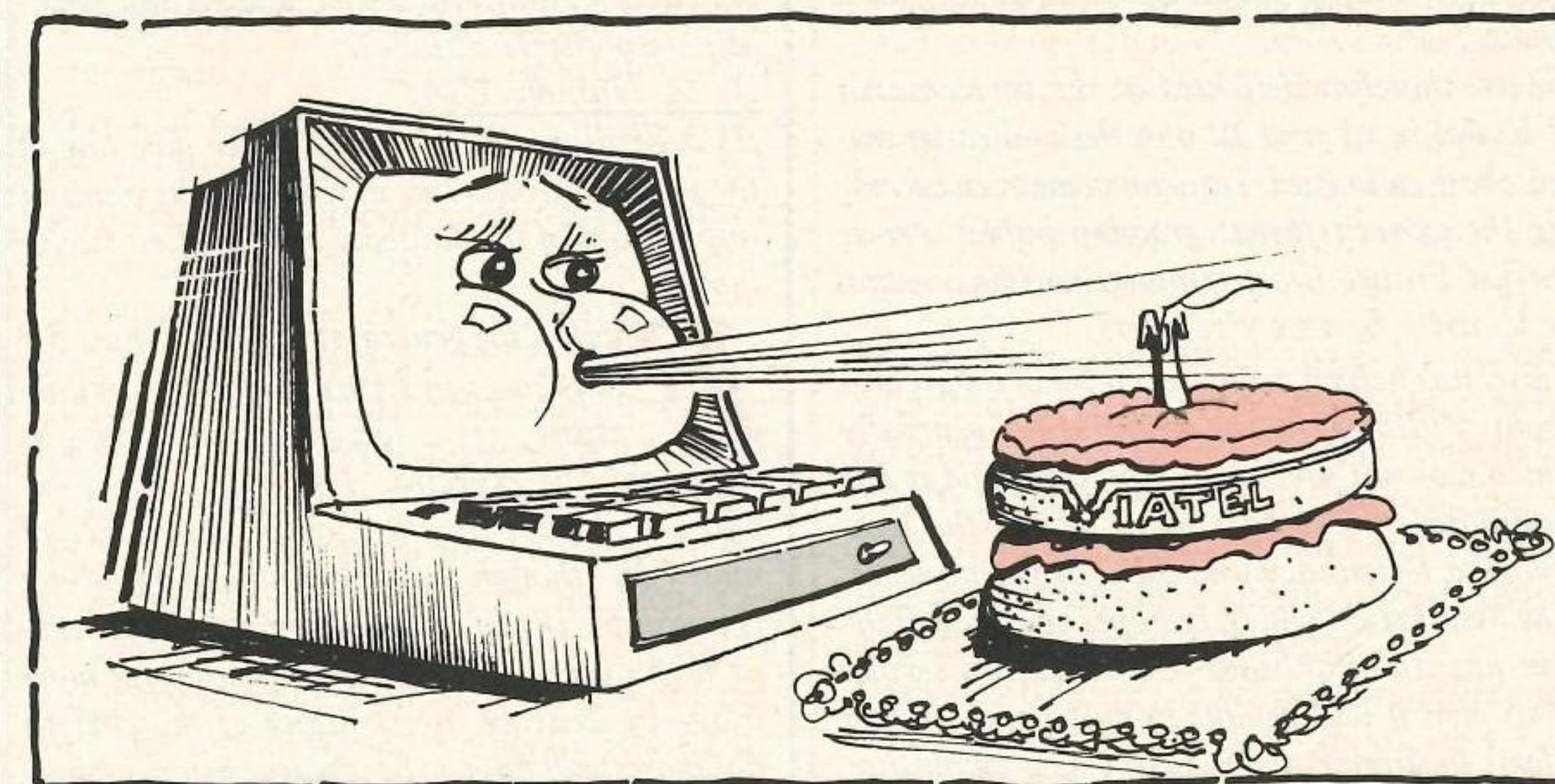
Business

Of course, other important business services on Viatel include those provided by the travel, tourist and entertainment industries, to name a few. National rail, airline and other services include schedules, fares and route information. Other, destination information is available also, such as hotel and motel locations facilities and tariffs.

Lindsay reports that the services on Viatel that attract the most usage are MoneyWatch, Microtex, Telebank and the Viatel messaging service.

MoneyWatch, with its rapidly updated financial information and range of highly informed commentaries on the business world is very popular with the Viatel Users.

The big attraction to the home user is Microtex, with its home computer software, bulletin boards, and information on personal computers. The growth rate is high and there is a large pool of micro computer owners who are potential Viatel users who are progressively moving on to Viatel as it becomes more widely known and accepted in the country.



The Commonwealth Bank's Telebank service was one of Viatel's very early trigger services and is retaining its position near the top of the ladder in the SP popularity stakes. It enables users to do their banking from home or office and also to pay bills. The number of companies on the list of bill payees is now well over 100 and includes a number of local councils, American Express, Gas Companies, Diners Club, TAA, Telecom itself and others.

As would be expected the messaging service usage is rising very quickly as the number of users any one user can message to, grows continually. This service could well become the single most popular service on the system.

Telex Development

Messaging, or electronic mail, should feel a further boost in popularity around mid-1986 when it is intended to give Viatel users two-way access so that users can receive as well as send Telexes, and also provide access to the International Telex System. At present, Viatel users can only send messages to the Telex network within Australia.

Summing Up

Viatel's first year must be considered a great success Lindsay said.

'With Viatel now firmly established as Australia's leading videotex service, we have a great base to build on.'

Over 12,000 users, a group of professional Service Providers and the Viatel team itself, which I believe has played the crucial role in establishing Viatel's current success,' Lindsay concluded saying 'I am sure the next year will be even better, Viatel users have a lot to look forward to.'

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THE MAN WITH THREE HATS

'or is it the mad hatter?'

Tony Cohen is Managing Director of ACE Videotex services. He is in the unique position of being a Viatel user, a Viatel Service Provider and president of the Australian Videotex Industry Association (AVIA). Mr Cohen's association with Viatel therefore is very widely based. He had these views to offer on Viatel's first year of service.

As Chairman of AVIA

The industry association in Australia has long recognised the importance of a successful public service to the health of the industry as a whole.

We are therefore delighted at the performance of Viatel in its first 12 months and congratulate those concerned. Its achievement in becoming the world's fastest growing public service outside France is a testimony to Telecom and to Viatel's Service Providers.

Viatel has helped to create a level of awareness about Videotex in the community generally which was not previously apparent and it has stimulated the private sector giving the technology a legitimacy and aura of permanence. The association sincerely hopes that now Telecom has an established and successful service of its own it will be able to make even greater efforts to support the industry as a whole during Viatel's 2nd year.

ing Viatel's 2nd year.

As Managing Director — ACE VIDEOTEX
As Viatel's first Service Provider and probably the first to show a profit from the service (operating profit from month 2) ACE VIDEOTEX wishes to express its satisfaction with Viatel's efforts during the first 12 months. Not only has Telecom succeeded in sustaining a high level of new registrations each month (a factor of critical importance to the revenue of many SPs), it has also been responsive to requests and prepared to deal with problems. Through Sascha Giles-Peters and her team they have been able to maintain a well indexed and generally responsible database.

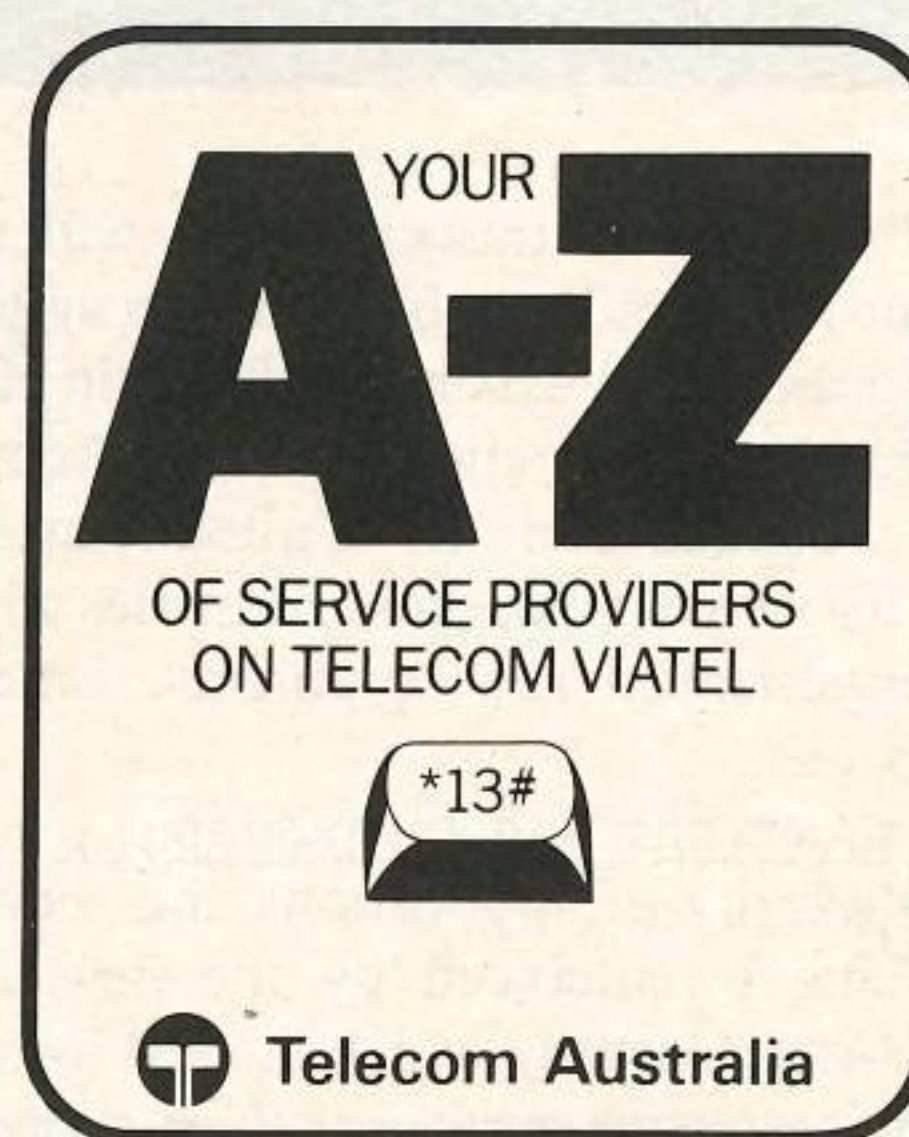
As 'A Humble User'

As a regular user of Viatel since day one of the service I would like to record my two major impressions of the database over the first twelve months.

Firstly, the general standard of most SP databases in terms of content and design is lower than might reasonably be expected. This is no doubt explained in part by the lack of experience of most SPs (though I understand expert advice is available if required!), however for the service to continue to flourish and to encourage more usage by existing users, many of the current databases will have to be replaced by ones which

are more relevant, useful or entertaining.

On the other side of the coin however, a particularly pleasing aspect of the first year has been the liveliness of the database, especially the consistent increase in new SPs and services. This has helped to keep Viatel vibrant and up to date and has, I am sure, led to many users assessing the service regularly to keep up to date with 'what's new'.



VIATEL FOR THE PERSONAL COMPUTER USER

Stephen Withers *

Magazines catering for the personal computer user are also becoming involved with Viatel.

As 75% of Viatel subscribers access the system with personal computers rather than dedicated terminals, it is not surprising that more and more service providers are targetting this group of users. Some importers and manufacturers of personal computers have been quick to realise the potential of Viatel as a communications channel between themselves and their dealers and customers. Commodore and Apple both provide product descriptions and lists of dealers in various parts of the country. Response frames are provided to allow users to send messages to the appropriate company and to place orders with participating dealers.

Information about the Apricot and BBC ranges is provided by Barson Computers. This company has also tested the water in respect of telesoftware by loading a typing tutor program for the BBC into their database. Microbee (one of the select band of companies that actually designs personal computers in Australia) has a fair-sized database that includes a magazine section that is sure to be of interest to the company's customers. Other features are a catalogue and a list of stores and dealers.

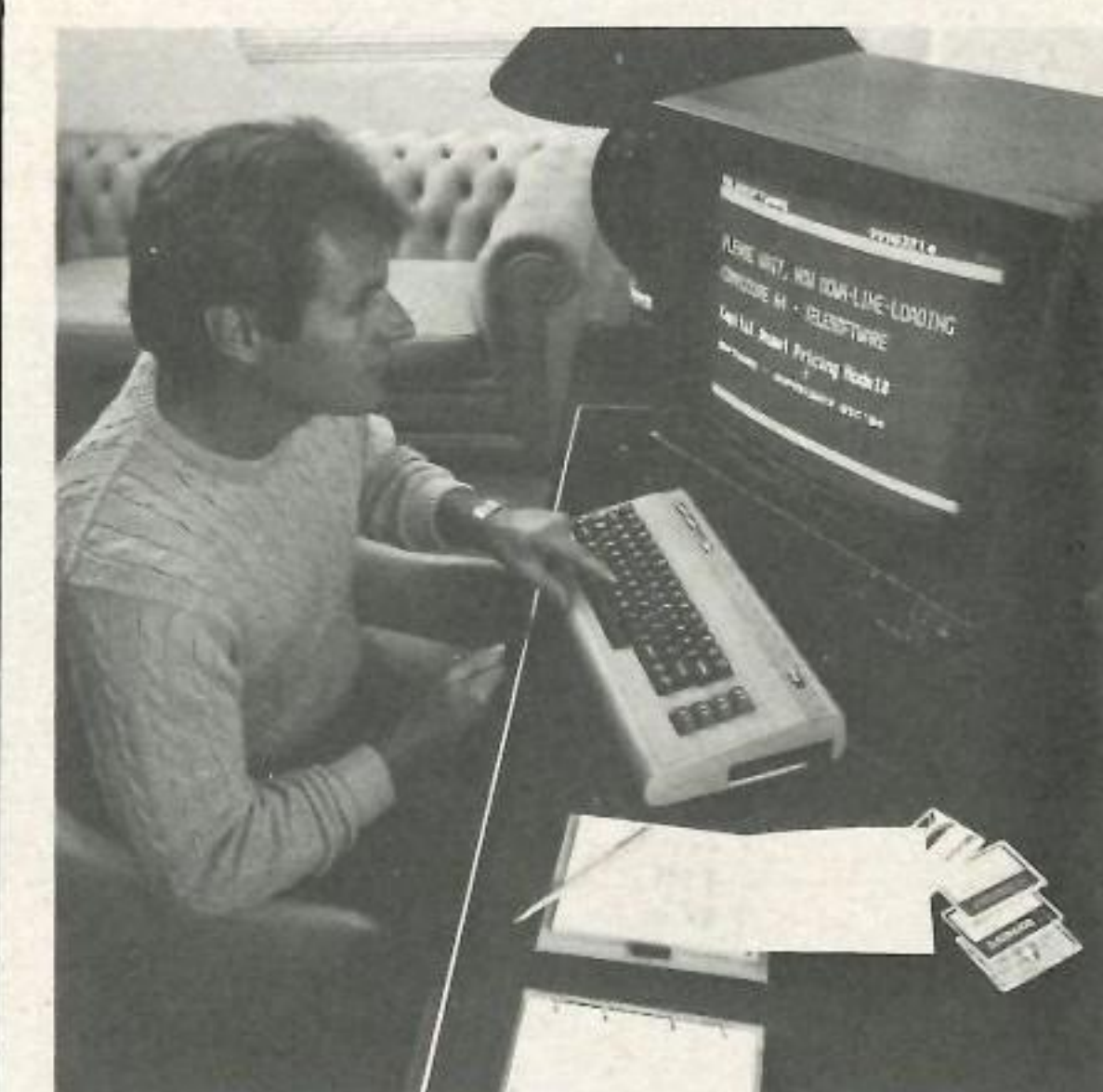
Several other companies in the personal computer market (including Sendata, Olivetti, and Hewlett Packard) have placed product information on Viatel. Some businesses go further and provide teleshopping facilities. A wide variety of goods and services from audio equipment to wine can be purchased by filling in a Viatel response frame (quoting a credit card number, of course).

Personal computer users are likely to be particularly interested in the range of goods offered by Brainstorm, Micro-Educational, Discware, Dick Smith Electronics, ABE Computers, and Nashua. These companies provide teleshoppers with the opportunity to purchase computers, programs, accessories, and consumables. I would stress that

this is not a comprehensive list, and that my only connection with any of these companies is as a customer.

Telesoftware is being provided by companies other than conventional publishers. Microtex 666 (described in detail elsewhere in this magazine) is a prime example, with an extensive telesoftware library containing hundreds of programs that may be downloaded into a personal computer for later use, as well as bulletin boards, classified advertisements, technical information, news items, and games. Tango, a Viatel umbrella organisation with a number of customers catering for the personal computer market, has a collection of three programs, with the promise of a bigger range to come. Tastel (an umbrella for Tasmanian organisations) provides a pair of programs for the BBC micro.

Magazines catering for the personal computer user are also becoming involved with Viatel. PC Australia (a magazine aimed specifically at users of the ubiquitous IBM Personal Computer) recently introduced a service on Viatel for the benefit of its subscribers. The database includes an index to the magazine and a list of the ten best-selling programs for the IBM PC, with plans to expand to telesoftware and reader surveys. Some people consider microcomputer users to be insatiable game players. While this is a gross exaggeration, there is a grain of truth in it as even the most unlikely people may sometimes be heard discussing the intricacies of some game or other. Although most of the games provided on Viatel are for one person, the system provides a useful vehicle for multi-player games. Many possibilities exist,

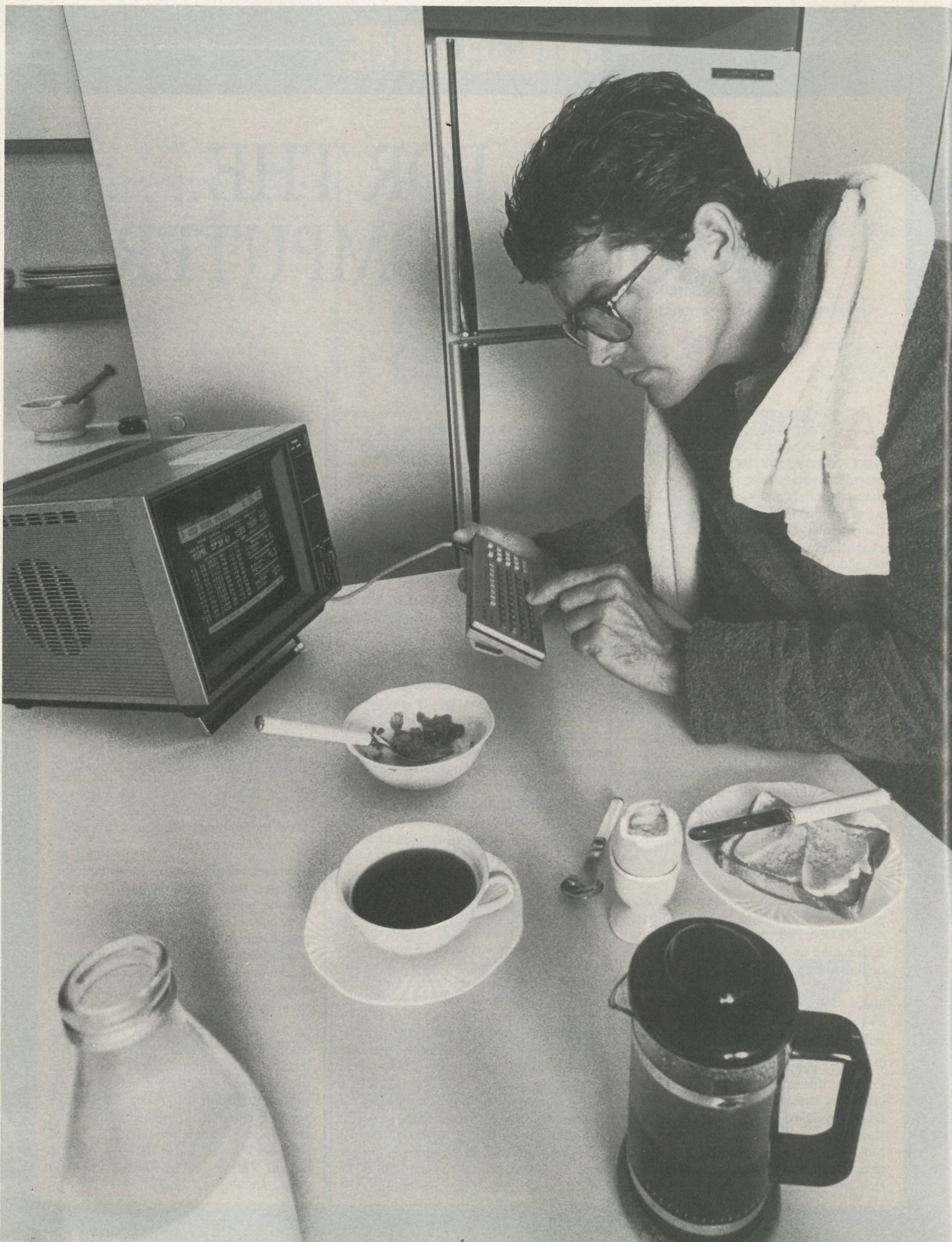


but the early developments revolve around conquest and colonisation. 'Play by mail' is not uncommon in many games (chess is a good example), but 'play by Viatel' would reduce the delays imposed by the postal service without losing the fascination of competing against an opponent on the other side of the continent, someone to whom you may never even speak.

Information about computer-related training courses is starting to appear on Viatel. In addition to the degree, diploma and not-for-credit courses offered by universities and colleges, commercial and quasi-commercial organisations like the Victorian Employers' Federation are offering courses aimed at those using (or planning to use) a personal computer for business purposes.

As we have seen Viatel gives the personal computer user access to a diverse range of services. Some simply display material in the traditional manner but now others are starting to exploit the greater power of the personal computer compared with that of a dedicated videotex terminal.

* Stephen Withers is a personal computing consultant. He is also consultant editor of Australian Personal Computer.



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TELESHOPPING IN AUSTRALIA

by Paul Budde *

Here we are in an Australian living room in Wagga Wagga. On his TV, John, 30, browses through a selection of wines, electronics and publications featured on his screen. He indicates his choice via a hand held key pad and then transmits the information. The screen flashes the message 'order received' and he continues to browse through the Electronic Newspaper and some entertainment applications from the comfort of his chair. This scene of electronic shopping is not viewed as being futuristic any longer. For some people teleshopping is now a fact of life. In this field we are only limited by social acceptance and education. The acceptance of teleshopping by consumers will depend on the same acceptance required by any new service or invention. The degree of acceptance depends on the answers to basic questions: Is this a product which cannot be selected via other avenues? Or does the service perform better than any other available?

The interactive part of videotex is what makes electronic shopping feasible from a technical point of view. The process for ordering items is very similar to the use of a mail order catalogue — telephone transaction. In his book 'The Future of Videotex', Efram Sigel describes a hypothetical ordering process:

"Diagrams or even colour photographs of certain products could be stored and transmitted at the touch of a button. After the user has looked at the description of an item, he could then decide to order it. Touching a few more keys would send his credit card or account number to the central computer, which would check his credit and flash an acknowledgement of the order. The supplier could use the computer record to produce an invoice, a confirmation or packing slip, and any other paper work to finish the transaction ..."

Cable Shop, the first teleshopping service available in Australia on Viatel follows that same sequence. The desirability of electronic shopping will be based partly on the type of electronic package with which it is linked. That is why Cable Shop is calling its service

Aside from the financial advantages there are time saving factors that will be a key benefit to many people.

an electronic magazine which also encompasses news, travel, education and information services.

The success of videotex in general and teleshopping in particular will depend on the package mixes. American Express, also active with teleshopping on Viatel, confirmed with its actions in the US the future connection between teleshopping and electronic fund transfer, with the purchase of 50% of Warner Cable, a large cable TV operator in the US. Both in the US and UK, videotex teleshopping services have expanded with the use of interactive cable TV systems. Some products are more suitable to teleshopping than others, especially those which require less detailed graphics and descriptions. Perhaps teleshopping will encourage consumers to spend more on spur of the moment purchases just as credit cards have done. Whilst teleshopping cannot and will not replace the experience of actually trying on clothes or touching beautiful crystal, it might have an impact on retail outlets and perhaps limit their numbers. Economists will need to observe the teleshopping processes in depth in order to see how they will affect shopping patterns.

In research I carried out for a large retail company in the Netherlands, we came to the conclusion that the existing stores would still exist, but a part of each store would be brought back to a warehouse function. Teleshopping orders would be distributed to these local shops and an overnight delivery service be used to have the goods delivered within 12 hours after the actual order.

Comparison shopping is another feature. Shopping could be much easier to accomplish by calling up the ads for five different merchants instead of driving or walking through each location, with ease of

comparison making it possible to get the lowest price available. This sort of shopping is available on the American service 'Compuserve' where discounts of between 25-40% can be obtained. More and more suppliers in the Cable Shop service are ready to start discounting to give the Viatel user an incentive to shop electronically. They in turn are saving on sales costs.

Aside from the financial advantages there are time saving factors that will be a key benefit to many people. More time means more freedom to do other things. Jerry Barrell writer of the article 'Changes in the Landscape: New Alignments and Aims in the World of Videotex' (US) describes this as follows:

"In social trends, the most obvious is the willingness of the consumer to purchase electronically which will provide greater freedom or save money."

Although the expectation for electronic shopping would be the fulfillment of both of these goals, it will most probably be a matter of fact for American families by 1990 (according to Sandra Yoon at a seminar at the University of Southern California).

Our expectations for the Australian market, based on statistics from Cable Shop usage are very encouraging. Between March 1985 and January 1986, the 100 suppliers of products and services received over 2,500 messages (orders, brochure orders and open messages).

If we weight these figures (not all suppliers were presented equally throughout this whole period) it gives the following picture:

- 87% brochure order
- 11% open messages
- 2% orders and bookings

Of all messages, 70% were sent in the first 5 months of Viatel (up to July) whereas 85% of the orders and bookings were received in the last three months. The actual sales resulting from brochure orders are not included here.

Whilst the number of actual orders is only a small percentage of the total, the fact that

85% of these orders took place only in the last two months of that period is encouraging. It is still too early to talk about trends, but the first two months of 1986 are showing a continuation of the November — December order flow. Cable Shop and Dick Smith Electronics are experimenting in this area. With a 70% PC user basis, the DSE products are an excellent test. There is an obvious need for these products among the early Viatel users. The social acceptance of the users towards these products is good, and as 'educated' PC users they are a captive market for teleshopping.

Like all other suppliers in Cable Shop, Dick Smith Electronics is presenting its services as an 'Informercial' package of products, that is a service comprised of electronic data, news specials, as well as teleshopping facilities. However, apart from the quality, the quantity of the information provided also seems important.

There is a trend towards high usage of programs with around 10-25 frames, however for Informercials with more than 50-100 frames the trend decreases dramatically. Whilst there needs to be some more research performed the cause appears to be due to

an overkill situation. Further segmentation could be one of the answers to this situation. Another key issue this electronic process raises is the privacy issue. It allows marketers and advertisers to reach their audiences with a high level of precision and efficiency.

With a public system like Viatel, privacy is reasonably guaranteed.

But this scenario could change if Telecom's Viatel were to become a private company, or if other private companies offered public videotex services in this area.

Other perceived disadvantages or negative aspects of teleshopping can be summarized as

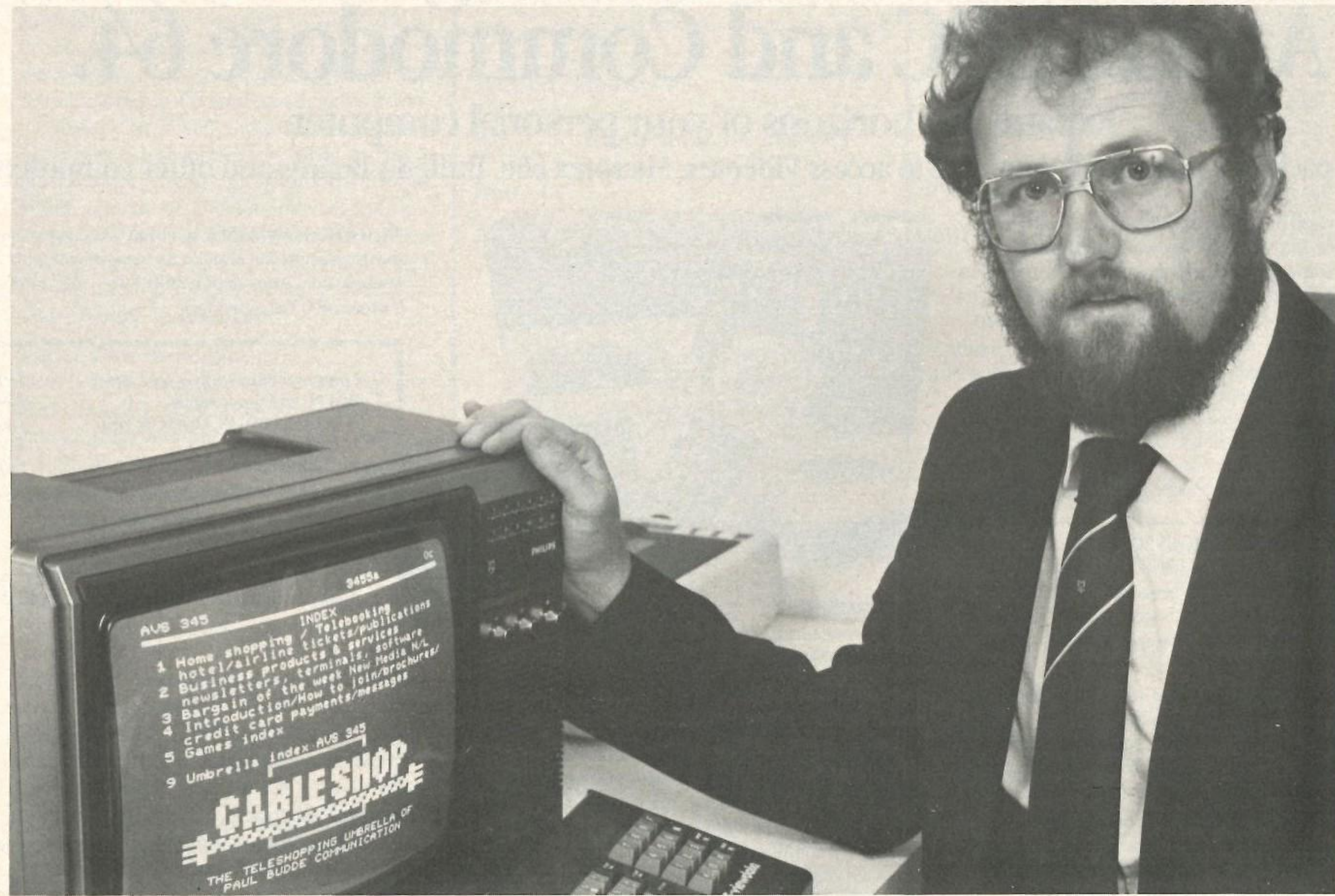
- Intrusion — by constant surveillance
- Interception — by dishonest employees of the operators
- Misuse of information
- Reduction of human contact.

Despite these aspects teleshopping has been embraced worldwide as convenient, time ef-

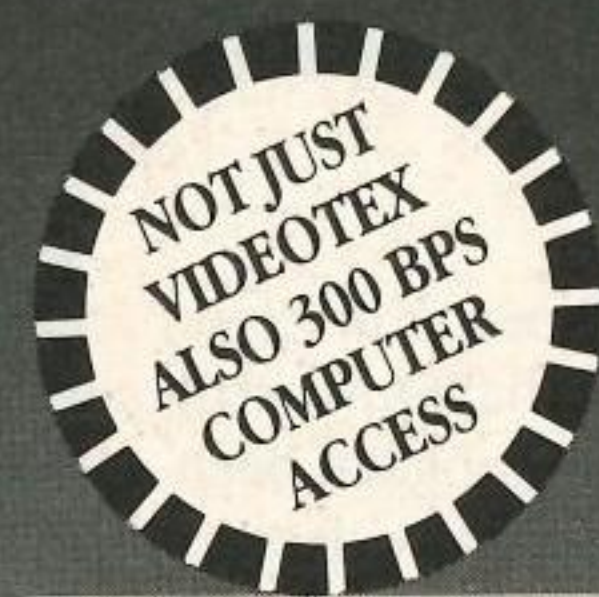
ficient and a cost effective means of competitive purchasing. In Australia whilst still in its very early stages, teleshopping has been well accepted by the first users of videotex. However it is still a tiny baby that needs nurturing before it can walk and eventually live a life on its own.

It is expected that by 1990 some 20-30% of residential videotex users will be involved in regular teleshopping. Companies who are now becoming involved in this exciting new area will definitely profit from an early start. As it will take an organisation at least two years before they find their way in videotex, now is the time for aspiring new generation vendors to set the wheels in motion.

* Paul Budde is a Videotex Marketing Consultant. He is the Managing Director of Paul Budde Communication Pty. Ltd. which amongst its various Videotex activities runs Cable Shop, one of the largest teleshopping 'umbrella' services on Viatel.



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TELESOFTWARE ON VIATEL

Scott Sanderson * explains the videotex telesoftware communications protocol.

Telesoftware is a novel application of Viatel that enables users who have suitably equipped home or personal computers to 'download' programs or shift the programs from Viatel on to their own disks or tapes. The user can thus 'buy' computer software from a vast library over the telephone line.

Telesoftware on videotex is a very recent development. In 1981, the Council of Educational Technology in the United Kingdom (CET) published a file transfer protocol for telesoftware on Prestel. (Prestel is the videotex service operated by British Telecom and is the 'big daddy' of Viatel). Only since 1983, 5 years after the Prestel service launch, has telesoftware been available in quantity on Prestel, whereas Viatel has had telesoftware available since launch day, in February, 1985! Viatel has many advantages as a telesoftware medium. The Viatel computers transmit at 1200 bits per second, four times as fast as most conventional information services which operate at 300 bits per second, and Viatel is available to all telephone subscribers across Australia at a cost which is unmatched by any other computer based service. It is also distance independent.

Viatel Communications

Viatel communication uses a conventional dual speed RS-232-C modem, which receives data at 1200 bits per second and transmits it at 75 bits per second in full duplex mode. Each character code transmitted between the terminal and Viatel computer consists of 10 bits in the sequence shown in Table 1.

Character Codes

Viatel uses a 7 bit character coding system providing 128 character codes from 0 to 127 decimal (or 0/0 to 7/15 hex). The complete set of Viatel transmission codes and how each looks on the screen is shown in Figure 1. Codes 32 to 127 (2/0 to 7/15 hex) are virtually identical to the displayable characters of the International Alphabet No. 5 (commonly known as ASCII). The codes 0 to 31 (0/0 TO 1/15 hex) are used mainly for cursor control and are not displayed.

When a Viatel terminal receives an 'ESCAPE' character code 27 (1/11 hex) it waits for the next character, the pair being known as a display modifier, ie. a command to the terminal to change some attribute of the display. For example, upon receiving 'ESC C' the terminal will display subsequent characters in yellow. The Viatel display attributes and their modifiers are shown in Table 2. The storage of software on Viatel frames provides a convenient way of breaking up the data stream into discrete chunks or blocks. The Viatel commands of '#' for the next frame and and '*00' to repeat a frame, provide a very simple and convenient means of linking blocks of data and requesting retransmission of a data block if errors occur. Viatel does have limitations, the most significant is the restricted transmission coding. There are some character codes which

Start bit	Binary 0
7 data bits	Representing the character code
Parity bit (even)	This will be either: i) binary 1 if the 7 bit character code comprises an odd number of binary 1's ii) binary 0 of the character code comprises an even number of binary 1's.
Stop bit	binary 1

TABLE ONE

Attribute	Display Modifier	Attribute	Display Modifier
Alphanumeric display	ESC A 65 red	Conceal display	ESC S 83' yellow
	ESC B 66 green		ESC T 84' blue
	ESC C 67 yellow		ESC U 85 magenta
	ESC D 68 blue		ESC V 86 cyan
	ESC E 69 magenta		ESC W 87 white
	ESC F 70 cyan		
Flashing Steady	ESC H 72	Continuous alphamosaics Separated alphamosaics	ESC X 88
	ESC I 73		ESC Y 89
Normal height characters	ESC L 76	Black background New background	ESC Z 90
	ESC M 77		ESC ½ 92
Alphamosaic display	ESC Q 81 red	Hold mosaic Release mosaic	ESC - 93
	ESC R 82 green		ESC I 94
			ESC 95

Table 2. Viatel display attributes and their modifiers

cannot be stored and transmitted in a Viatel frame. Only character codes from 32 to 127 (2/0 to 7/15 hex) can be used to store information and data on Viatel. Computer program data on the other hand requires a full 8-bit file with character codes from 0 to 256 decimal (0/0 to 15/15 hex).

Transmission errors are a problem that Viatel shares with all data transfer systems. Telephone line noise is no more than an inconvenience when it appears in a page of text read by a human being, but it is intolerable in a program transfer or download service. To solve these problems, a file transfer protocol was developed by CET in the UK. It has been substantially adopted by Telecom Australia with some minor improvements and clarification. Telecom Australia has published a document entitled 'Format Recommendations for Viatel Telesoftware, Issue 3 July 1985, describing the protocol.

The protocol provides for:

- the conversion of an 8-bit oriented file to one consisting only of valid, Viatel codes.
- its segmentation into frame sized blocks.
- the arrangement of these blocks on Viatel.
- the detection and correction of data transmission errors.

It must be emphasised that it is a data file transmission protocol. It does not specify anything about file contents, or the way a terminal computer may process the file as it is received, or the way the file is stored in mass storage on the terminal computer.

Conversion

In order to allow 8-bit oriented files to be stored and downloaded from Viatel frames, a series of control sequences is used to shift those non-Viatel characters into the displayable range (in a similar way to Viatel display modifiers). The terminal computer must process the control sequences it receives, to regenerate the original characters. This 'unpacking' from the telesoftware code conversion is the only processing a terminal computer downloader should perform on the telesoftware transmission.

The control sequences and the code shift values are shown in Table 3 and diagrammatically in Figure 2. The code extension control sequences can add considerably to the size of the files when stored on Viatel; for full 8-bit oriented files the size may more than double.

Segmentation

Since each Viatel frame can store a maximum of 877 characters of Service Provider data, the telesoftware files must be broken into a series of blocks equal to the Viatel frame size. A typical program on Microtex 666 for example consists of about 30 Viatel frames with some programs taking over 60 frames of storage. It is interesting to note that information on telesoftware stored on the UK Prestel service states that their files are 'rarely longer than 20 and almost never over 50 frames.'

Arrangement of Blocks

The telesoftware files are stored as a series of consecutive frames (a-z) of a Viatel page. The first or header frame of Microtex 666 telesoftware includes details about the program, its size and operation. A very important series of characters at the bottom of the frame is recognised by the terminal downloader as the start of the telesoftware process. After downloading each frame, the terminal computer sends the '#' character to the Viatel computer to retrieve the next frame. When the 'z' frame is received the downloader must recognise this and transmit the '0' character to retrieve the 'a' frame of the next page. This process can continue indefinitely enabling

Table 3. Code extension control sequences.

CODE EXTENSION CONTROL SEQUENCE	CODE EXTENSION OFFSET (decimal)	FILE CHARACTER RANGE	CONVERTED FILE CHARACTER RANGE
0	7/12,3/0	0	2/0 to 7/15
1	7/12,3/1	+64	0/0 to 1/15
2	7/12,3/2	-64	8/0 to 9/15
3	7/12,3/3	-96	10/0 to 11/15
4	7/12,3/4	-128	12/0 to 13/15
5	7/12,3/5	-160	14/0 to 15/15

VIATEL TRANSMISSION CODES														
BIT 7	BIT 6	BIT 5	BIT 4	BIT 3	BIT 2	BIT 1	BIT 0	BIT 7	BIT 6	BIT 5	BIT 4	BIT 3	BIT 2	BIT 1
0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
0000	0	NUL						0001	1	SOH	CURSOR ON			
0010	2	STX						0011	3	ETX				
0100	4		CURSOR OFF					0101	5	END				
0110	6							0111	7	ETB				
1000	8	ACTIVE POSITION BACKWARD (APB)						1001	9	ACTIVE POSITION FORWARD (APF)				
1010	10	ACTIVE POSITION DOWN (APD)						1011	11	ACTIVE POSITION UP (APU)	ESC			
1100	12	CLEAR SCREEN (CS)						1101	13	ACTIVE POSITION RETURN (APR)				
1110	14	ACTIVE POSITION HOME (APH)						1111	15	US				

Figure 1

NOTES:
1. COLUMNS 0 AND 1 FORM THE CONTROL CHARACTER SET.
2. COLUMNS 2 AND 3 FORM THE SET OF DISPLAY ATTRIBUTE CONTROL CODES.
3. COLUMNS 4, 5, 6 AND 7 FORM THE 80 CHARACTER SET.
4. COLUMNS 8, 9, 10, 11, 12, 13, 14 AND 15 FORM THE MOSAIC CHARACTER SET. THE SHADDED AREA REPRESENTS FOREGROUND COLOUR.

AUSTRALIAN TELECOMMUNICATIONS COMMISSION
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a file of up to 999 frames to be stored on Viatel frames and downloaded to the user's terminal computer at home or in the office. The larger programs on Microtex 666 extend to four Viatel pages, each page consisting of 26 frames. All Viatel users can explore the telesoftware library indexes on Microtex 666 by keying *6663- and examining the program header pages. Most programs are only available to be downloaded by Microtex 666 members but a few are available to all Viatel users. If you key '# from the header page (eg. *66602081-) you can see what telesoftware looks like on a Viatel frame.

Error Correction and Detection

The segmentation of telesoftware files into a series of Viatel frames provides a convenient basis for error protection in addition to the simple horizontal parity on each character. The block of characters on each frame is preceded by the control sequence 'double bar A' signifying the start of the block, and ends with 'double bar Z'. The 'double bar Z' control sequence is followed by a vertical parity checksum which is the result of bit-wise exclusive or calculations on every character in the block. This, combined with the horizontal parity check, ensures a very low probability of data errors passing undetected.

Members should be aware that all telesoftware stored on Microtex 666 uses the last frame charging facility recently introduced by Telecom. Any frame prices on the telesoftware file frames are only charged to the Viatel user after the last frames have been successfully downloaded. This is an important pro-

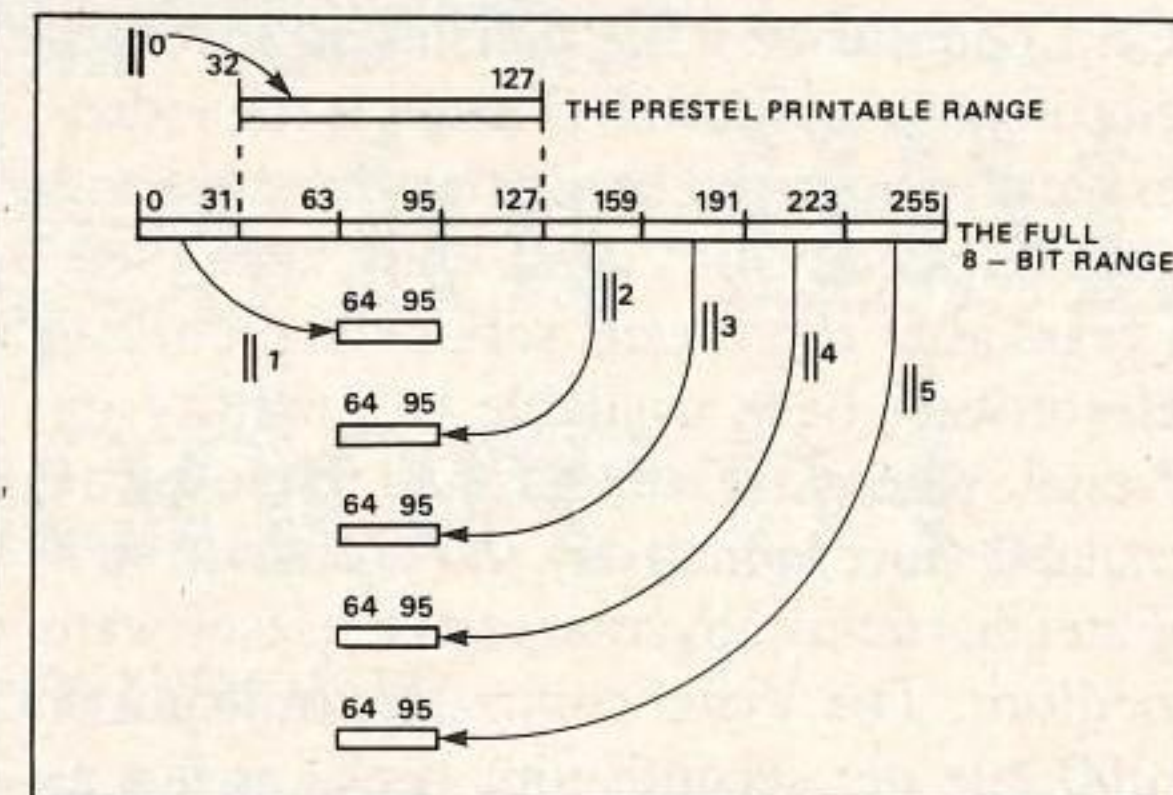


Figure 2. Diagram showing how characters from the full 8-bit range are mapped to characters safely within the Viatel displayable range by the use of the locking shift control sequences 1 to 5. The 'shift out' control sequence 0 instructs the terminal to treat subsequent characters without mapping.

tection to Microtex 666 members as the possibility of having to abort a telesoftware download is ever present with complex programs consisting of a large number of frames. **Microtex 666 Telesoftware** As already explained, the Telesoftware protocol is only a data file transmission protocol. It does not specify the format of the stored data.

Microtex 666 telesoftware complies fully with the Telecom recommendations contained in the document 'Format Recommendations for Viatel Telesoftware,' and this is the only standard for telesoftware which is relevant in Australia.

Within this protocol, Microtex 666 has adopted the convention of storing all telesoftware on Viatel as a binary file representing an image of the original program mass storage format. For example, for IBM software it is the executable object code of a program which is stored and not the text source files. For simpler computers, the tokenised BASIC or machine code is stored and downloaded.

This means programs can be downloaded and executed immediately without the user having to tokenise or compile the text source files. Where it is desirable to provide the same software for a number of different computers, then Microtex 666 provides separate executable versions for each computer. For example, the excellent horse race betting program 'Wizard of Odds' is available separately for the Commodore 64, Apple II and BBC Micro.

In the United Kingdom much of the telesoftware is stored on Prestel as text source files. Microtex 666 considered this less convenient for their users as the files still require tokenising or compiling before they can be run. It was considered more suitable for simple Basic programs.

Computer Downloaders

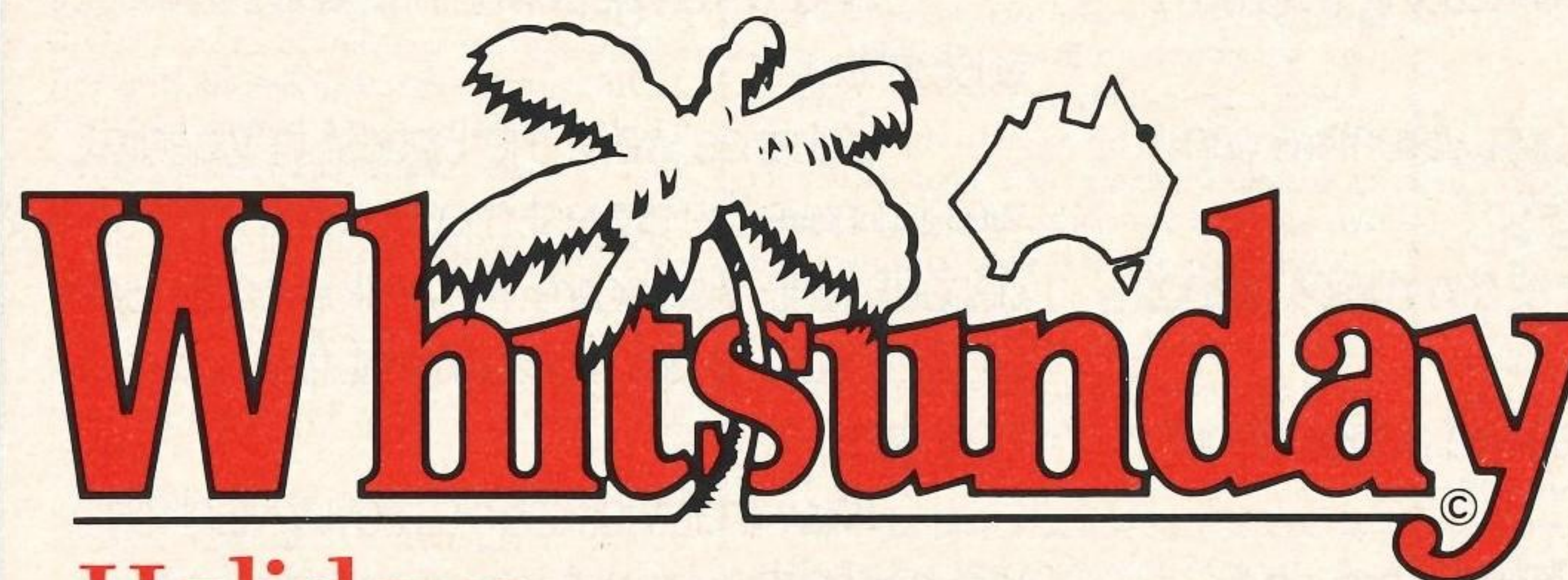
A very high proportion of Viatel subscribers (over 70%) are using home or personal computers to access Viatel. Unfortunately, many

of them may be unable to take advantage of the exciting possibilities of telesoftware, if their Viatel terminal software simply does not include a telesoftware download facility. Some downloaders will only download files less than 26 frames long. A danger with imported videotex packages originally designed to work only with Prestel, and the UK telesoftware databases is that the telesoftware downloader may be suitable for downloading only text source files. This is not true for all imported videotex packages as the better quality products do provide full functionality and work perfectly with Microtex 666 telesoftware. Another problem with some downloaders is that on completion of the download, they automatically enter and run the downloaded program, but still leave the modem connected to Viatel possibly incurring ongoing connect time charges. Most users of personal computers who are unable to download software will find they

can purchase replacement videotex software capable of performing the download, without the need to modify their computer or modem hardware.

Software on Microtex 666 complies fully with the Australian Telecom specification 'Format Recommendations for Viatel Telesoftware, Issue 3 - July 1985'. The 'Microtex 666 Packages' (or Viatel kits) and software, currently available from Information Solutions for the IBM PC and compatibles, Apple II series, BBC Micro and Commodore 64, are guaranteed to work successfully.

* Scott Sanderson has his own company Information Solutions Pty Ltd, which directs the operations of Microtex 666 on behalf of Australian Consolidated Press. Information Solutions has developed and marketed the Microtex 666 range of packages, provides specialist consultancy, services on videotex and communication networks.



Holidays

Whitsunday Mailbox Pages

860172	To Contact Whitsunday Holidays
8601851	Open Messages
8601852	Flight Bookings
8601853	Package Holiday Bookings
8601854	Travel Bookings
8601855	Yacht Bookings
8601856	Accommodation Bookings

Whitsunday Index Pages

8600	Main Index
8601	Introduction to Whitsunday
8602	Accommodation Directory
8603	Adventures Afloat - Boating
8604	Attractions & Activities
8605	Travel & Holiday Packages
860185	Response Frames

Whitsunday News Pages

86019	WHAT'S NEW in Whitsunday
86016	This week in Whitsunday
8601999	Specials - don't miss out!

Whitsunday - Handy Page Selection

86021	Island & Mainland Resorts
86024	Motels
86032	Bareboat Charters
86034	Day Trips - Island Cruises
86042	Water Sports - Diving etc.
86045	Entertainment - Night Life
86051	Air Travel - How to get here
86053	Holiday Packages
86054	Bus Services & Rental Cars
860412	National Parks Camping Guide

If you have any questions or comments about this VIATEL database, please contact Bill McLeod, Whitsunday Holidays, P.O. Box 425, Airlie Beach, Queensland 4802. Telephone (079) 466 059 or send a message on 8601851.



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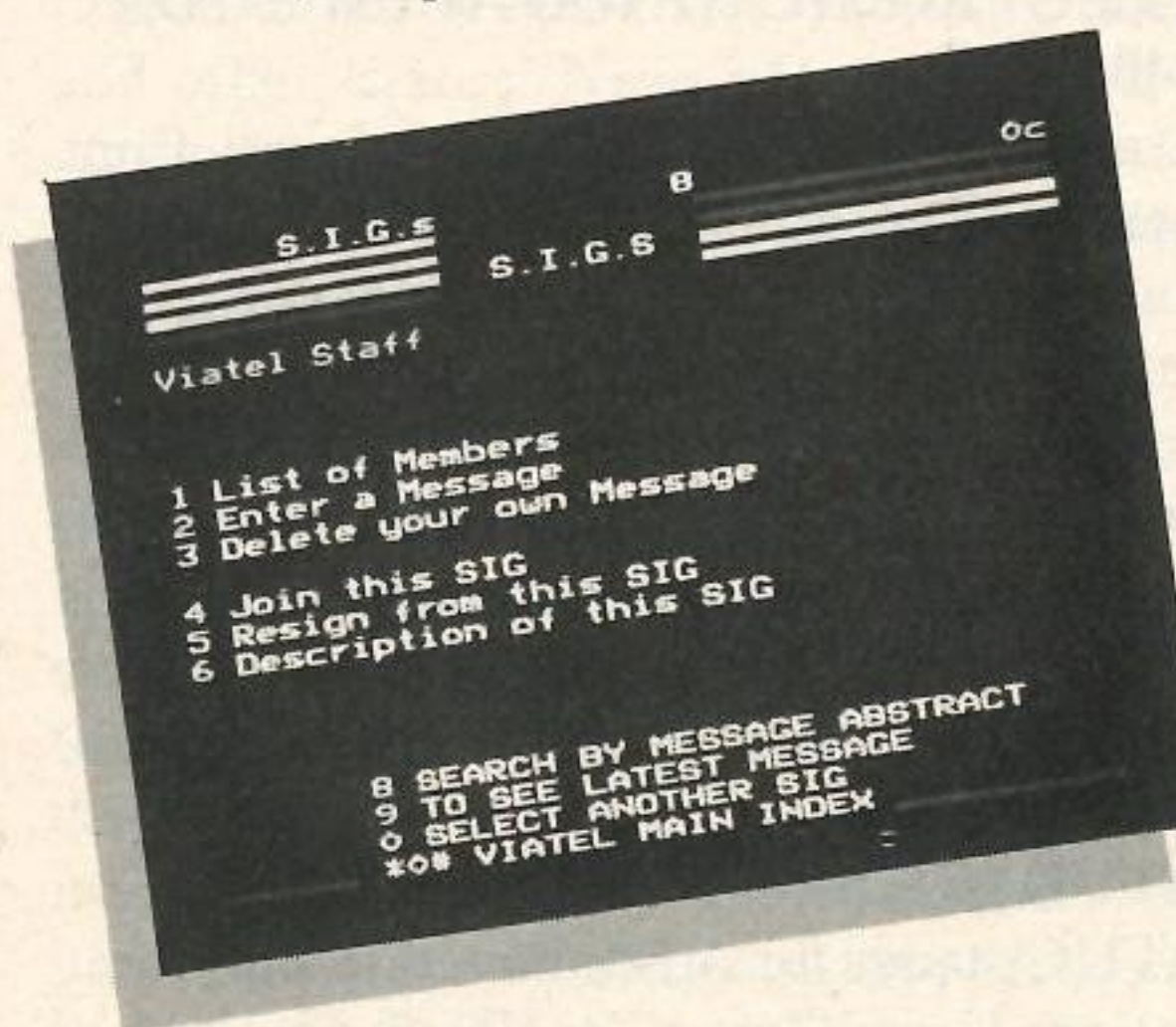
SIGS, A NEW VIATEL SERVICE FOR SPECIAL INTEREST GROUPS — COMING SOON

by Les Cardilini

Sooner or later, people who have common interests seem to find each other out and form groups to exchange ideas and trade their experiences. To do so on a wider, national scale is not always an easy matter, particularly in a country as large as ours.

But Brian Smith at Viatel hopes to soon make it easy for users around the country who collectively have special interests, to get together on Viatel. Brian is Viatel's Marketing Manager and he recently demonstrated SIGs, a national videotex service devised primarily for Special Interest Groups (SIGs). A special interest group, or SIG, might be formed on the basis of some leisure or hobby activity, or it could arise within a professional community such as doctors, engineers, teachers or a chain of retail stores, to name just a few. Membership of a SIG could be gained or surrendered by calling up the appropriate frame within a SIG, to register that interest.

The SIGs service would also give general users of Viatel the opportunity to put up information and change frames on Viatel. This facility is available only to Service Providers, at present.



In the Public area, a SIGs might be formed by a large retail outlet or other business to pass information about staff, prices, meetings, etc., among its offices around the suburbs, or country for that matter.

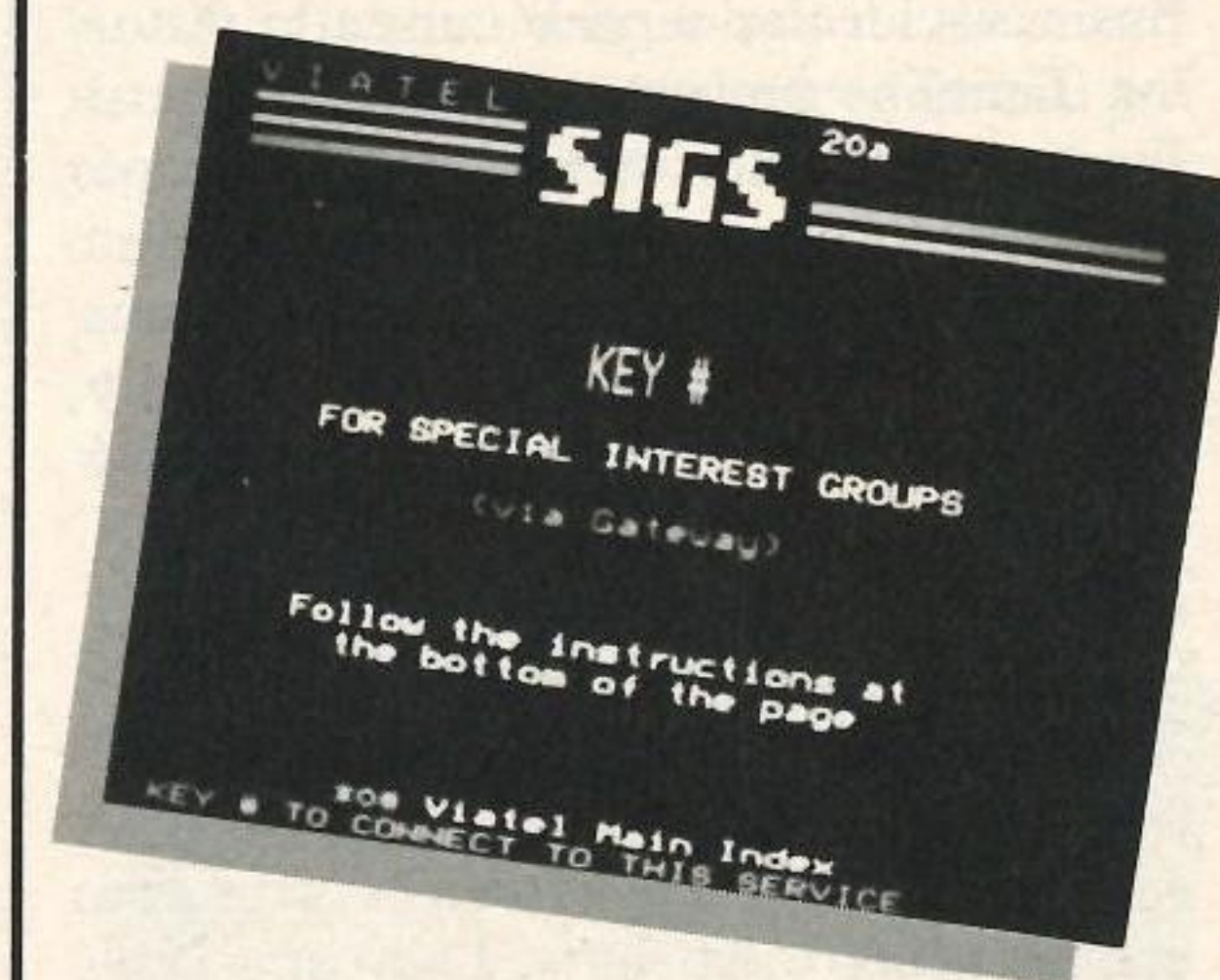
Private users on Viatel could use SIGs for club activities, posting items for exchange or of general interest to collectors and other hobbyists. The list of possibilities is limited perhaps only by the imagination.

In the context of either application, messages would be used in a virtually real-time way, although graffiti monitoring and removal of material considered offensive would be possible in the SIGs system. Of course, some SIGs would be quite open and of interest and concern to members and non-members, alike. On the other hand, a SIG formed on the basis of, say medical practice understandably may require some qualifications for membership. Access to certain information within such a SIG might also be restricted.

It was important that the SIG service was not seen as a competitor for currently successful operations on Viatel such as the personal computer and telesoftware clubs, Brian explained. He saw the roles of those kind of groups already established, as important and continuing ones.

Upon entering into the main, SIGs node, a user might browse through a list of SIGs already formed, or select a SIG of particular interest from the list. Options within the SIG frames typically would include a description of the SIG currently accessed, membership lists and how to join that SIG. Further options would include frames — up to 26 frames — for leaving messages, if authorised to do so, and the choice of deleting one's own messages.

Messages in the SIG would remain there for



some pre-determined period. Brian explained that this period would need to be practical in the context of the activities of the SIG and it was intended only to prevent the SIG's database from becoming clogged with deadwood, or redundant, out of date information. Members placing messages on the SIG list would be offered the choice of including a short abstract of the text, to facilitate faster searching in long lists on a busy SIG. Those messages could be searched in a list of abstracts. Message frames could also be accessed in chronological order, from the last message listed. Browsing forward and backward within the list of messages would be possible, as well. The staff of an organisation with offices around the country could also set up their own SIG.

Details of SIGs no doubt will soon appear on What's New on Viatel. The usual index frames and help routines will be included on the main, SIGs node.

Sascha Giles-Peters (Manager Viatel Database) and Cheryl Daly (formerly of Viatel Branch now working for Information Solutions) created the attributes and visual appearance of the SIGs frames, and Rodney Eisfelder wrote the software for SIGs.

NEW SERVICE PROVIDERS

ABE COMPUTERS NODE 72901

Computer shopping and on-screen order service offering personal computers, a large range of accessories, furniture and Brother equipment. This provider also distributes Roland DG products. Public domain software is offered free to purchasers of PC compatible computers.

PC EXTRAS NODE 778001

Business-videotex service currently featuring Timeline project management spreadsheet software, how it works, what it does and how to obtain a demonstration disc. Many pages of browsing through communications, videotex, and presentation software, a variety of utilities including Norton, Turbo and Borland, and how to contact PC Extras.

OCEANA PROMOTIONS NODE 878

What's on locally and interstate in the way of music and entertainment. Tipping service for races (may the horse be with you) and the week's Tattslotto, Lotto and Pools results are listed, if you have lost your numbers. Dates, venues and booking information for theatre, opera, film, dance and concert are easily located and music VDU invites you to meet the stars.

VIDEOTEX VIEWPOINT NODE 4556

News and reports on what is happening in the world Prestel and Videotex scenes. Current frames include brief preview of Videotex '86 to be held in Dallas, Texas in May. Product list includes literature and videos of the Videotex User Conference held in London in January 1986. Viatel users are invited to leave their own videotex news and views on this node.

CSIRO NODE 232

CSIRO Division of Building Research offers a selection of simple practical solutions to problems facing many home owners and builders; from foundations and borers, to roofs, insulation and noise. Tips on handling storms, flood and fire - before and after - are also provided, and publications, video cassettes and school project material covering a wide range of general interest topics are catalogued over several frames. How to contact CSIRO offices in different States, and ordering facilities, are also available on this node.

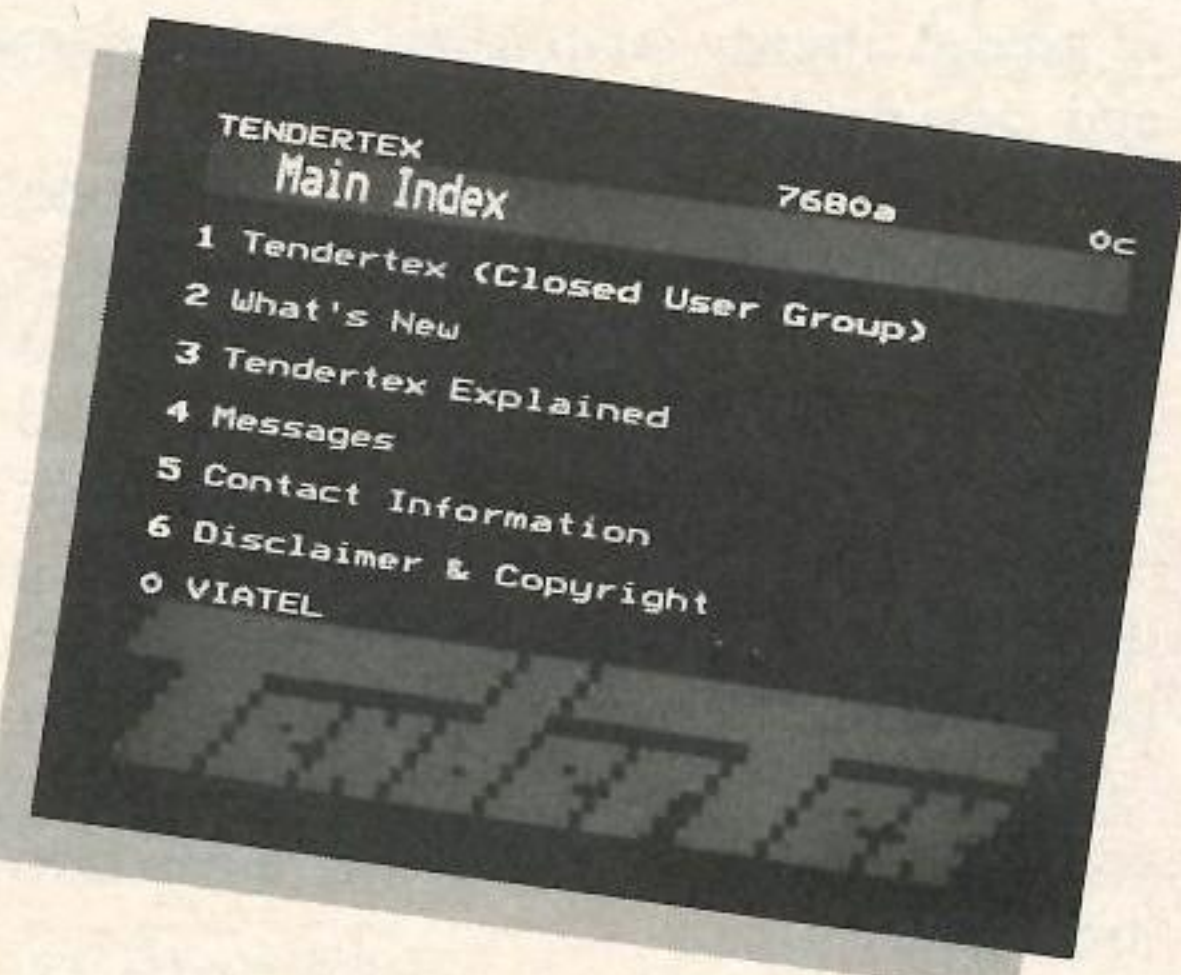


D4 DATA NODE 408

D4 DATA offers to develop computer systems to meet the needs of a variety of industries. Frames presently available provide advice to the gardener for selecting trees, flowers and vegetables for different locations and times of year, including suggestions for the current month. Common names and botanical names may be used to find suitable plants and how to prepare and care for them. Garden Teleshop may be keyed in, to browse or shop for garden and accessories.

TENDERTEX NODE 7680

This service lists details of recent tenders including a description, name of the issuing authority, contact for enquiries, tender number and closing date. Information pages explain the service and provide contact numbers for a variety of media including telex and facsimile. A sample tender is shown. Current tender information may be accessed only by subscribers to Tendentex or by arrangement with the Service Provider.



RAILWAYS OF AUSTRALIA NODE 222950

Extensive information on motor rail and normal passenger rail services between most mainland capital cities, Alice Springs and Cairns. Point to point and en-route schedules show where and when you might expect to be along the way, travelling ROA. Standard and economy fares and booking information are displayed as well as news highlights of new and updated services around the continent.

DICK SMITH ELECTRONICS NODE 34572

Catalogue shopping for electronics products from basic kits and solar power to burglar alarms, robots, books and computers. Products may be selected from on-screen listings and specials or ordered by keying in details from the popular DSE catalogue, at home. Brochures and catalogues can be ordered and messages sent via this node and credit card shoppers are catered for.

MENTOR COURSEFINDER NODE 344

Details of external studies post-graduate and under-graduate courses available at colleges around Australia. Study areas include business and law, agriculture, engineering, maths and computing, education, health, arts and social sciences. TAFE courses for electronics trades and those leading to careers in the TV and radio production and broadcasting industries - from acting to operating a station - are included. User-message response frame available.

COMPUTERPHONE NODE 80041

Telecom service explaining how the Computerphone may be utilised for data communications, electronic mail, problem solving and training - and how it works with Viatel. Computerphone training courses available in each capital city are outlined and software plans are discussed. A 008 telephone service for Telecom Computerphone enquiries is listed and a message frame is available if required.

ELECTRONIC NEWSPAPER NODE 34567

Daily-type headlines and news items from home and abroad. Feature news and frames for browsing or selecting items of particular interest, including sport. Financial and economic news and Stock market 'scoreboard' are included in the main index as well as headlines and access to news items in Dutch. Teleshopping service to Cable Shop and statistics on Viatel usage are also accessible via this node.

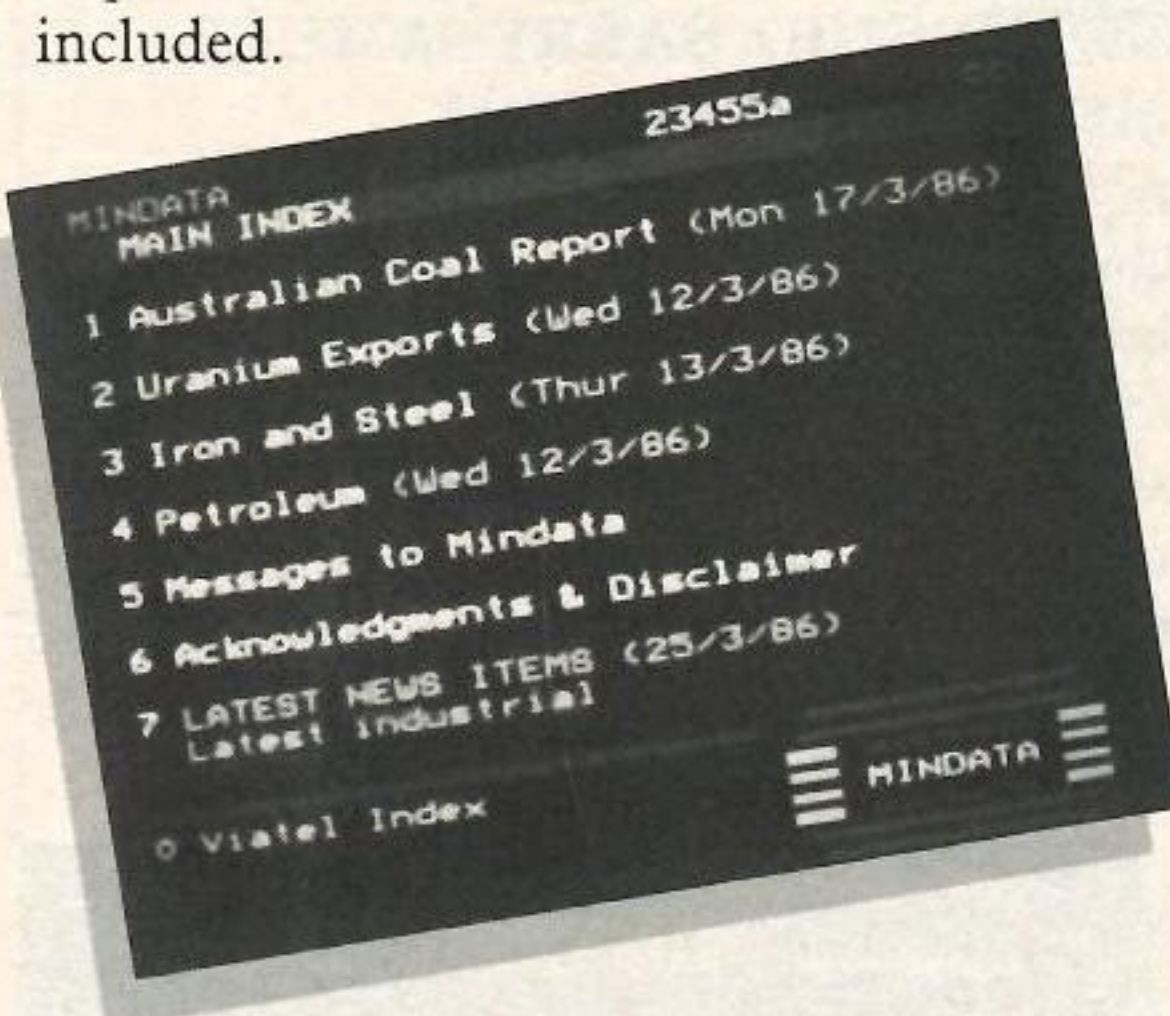
ATUG NODE 300

ATUG stands for Australian Telecommunications Users Group. Its Viatel service out-

lines its policies and aims and includes notices of meetings and coming events, an industry job market and general contact information and message frame. Information about user groups and their interests within ATUG is provided along with comment on industry issues.

TELE TIPS NODE 457

Some 'pearls of wisdom' about betting on horse races, and feet-on-the-ground advice about making money out of the sport of kings is provided for Viatel customers generally. Inside information is available only to the limited membership of The Firm, a closed user group. Membership details, how Tele Tips works and who to contact are also included.



MINDATA NODE 23455

A comprehensive listing of data relating to minerals and energy production, markets and pricing. Coal, uranium, iron and steel and petroleum head up the different sections. News items about mineral trading and trends are included with reports and statistics in both written and graph form. General frames include information sources and message facilities for contacting Mindata.

CIG AGRICULTURE NODE 77600

Up to date agricultural information especially concerning parasite control in the woolgrowing industry and currently featuring OSCAR, a recently developed treatment for sheep lice. OSCAR is compared with traditional methods such as dipping and showering, in terms of economics, mortality rates and other factors. News of a new blowfly control method is also announced. Contact numbers and message frames are available for more information from CIG.

OLIVETTI PC NODE 42456

An information service providing details of Olivetti computers and office equipment. Hotline news frames may be accessed for details of new products and Olivetti dealers throughout Australia are listed by State. A dealer only closed user group facility also may be accessed through this node for product information and prices, press releases and registration.

C&L W D SCOTT NODE 38025

This Service Provider specialises in executive recruitment and salary policy and administration. Salary trends are compared in different industries and disciplines and may be viewed against CPI and average weekly earnings trends. Executive positions vacant are listed by State, and initial interest may be registered on the response frames. Check your salary against the 'latest 20' in Salary Monitor, on this node.

GEMINI MAIL ORDER NODE 23555

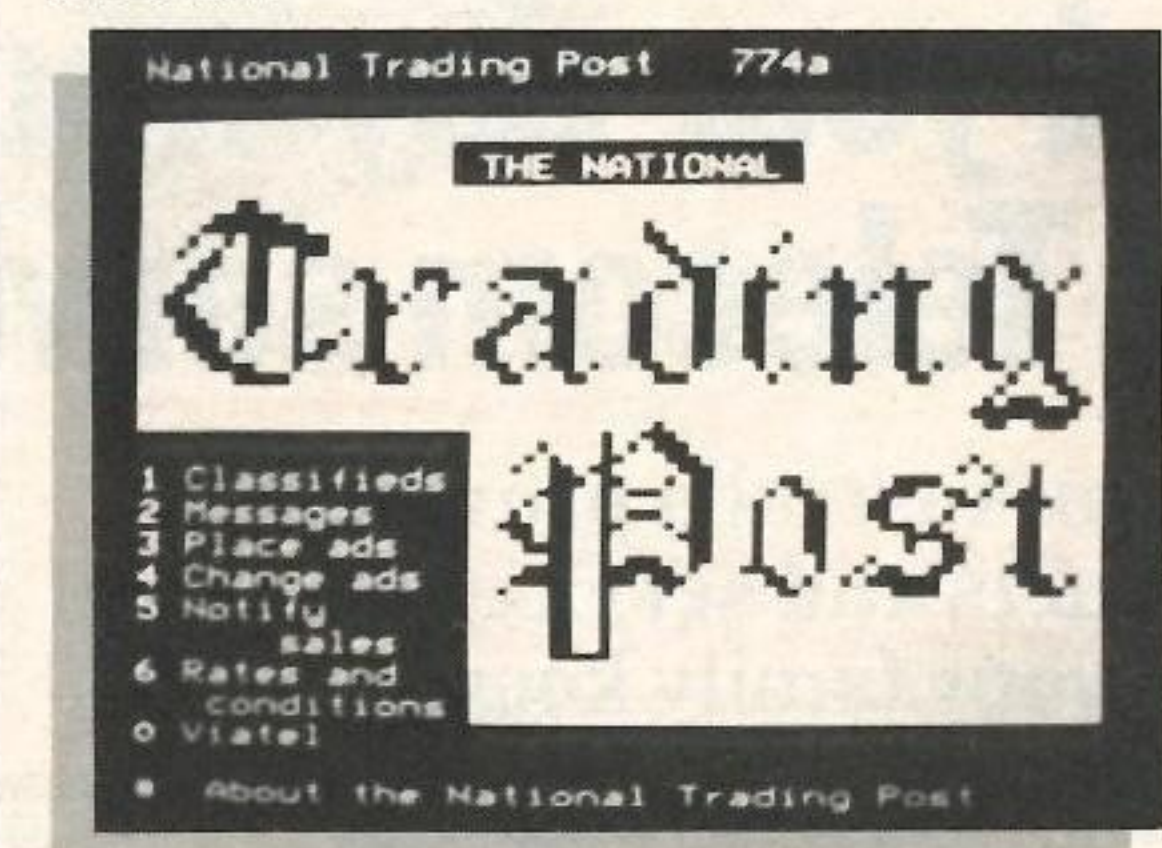
Massage products and accessories, and instructional books and videos are some of the items available through Gemini's mail order service. Anti-stress programs and a large selection of music on cassette are also listed. A contact frame is available.

BSS TEMPTTEL NODE 729

A closed user group service for the selection and placement of permanent and temporary staff and employees. Training and computing services offered by the provider are also outlined. Advertising space on the node is provided for subscribers. Terms and conditions of subscription are listed and a registration frame and contact information may be accessed.

SIMPSON LTD. NODE 5570

Lots of information about the Simpson range of whitegoods, and a handy collection of hints for solving problems around the house such as stains on clothes and rugs, messy pipes in the laundry and many more. Other services on this node include recipe of the month, cooking, laundry and freezing hints and information on how to contact Simpson sales and service offices by telephone or Viatel. Brochure request facilities are available also.



NATIONAL TRADING POST NODE 774

A comprehensive classified advertising service offering goods of nationally wide interest for sale and wanted to buy. Classifications such as books and paintings, antiques, vintage cars, real estate and others may be selected for browsing. Deadlines and rates are listed. Information frames explain policies and how to leave messages and lodge your classi-

fied advertisement with the National Trading Post.

SANDS BUSINESS SYSTEMS (SBS) NODE 38035

SBS is about Sands Business Systems and the John Sands SEGA Terminal. Frames provide 'walk through' demonstration of the SEGA terminal, what it can do and how it can be tailored to your needs. Special features of the SEGA terminal cater for Prestel (Viatel), ASCII communications and computer applications for education, use in the home and recreation. A more-information page is included if you need more details.

ELECTRONIC CELLAR DOOR NODE 235750

Brush away some cobwebs from the screen, examine the labels and enjoy an electronic stroll through some of the wine cellars of South Australia. Many wines are described in tempting detail. Introductory dozens are suggested, or shopping may be done from the cellar door price lists at per bottle or per dozen bottle prices. Listings show wine prices and interstate freight and insurance charges.



A.C. GOODE & CO. LTD. NODE 8808

A wide base of share and investment information, advice and comment. As well, stocks considered to be of significant interest are singled out for expanded comment. Newcomers to share trading should find the glossary of terms helpful in appreciating more what the larger, general index of investment facts and figures mean. How to use Goode's teleshopping service is explained and details of membership of this additional, closed user group facility are outlined.

DISCWARE NODE 778000

Distributor of a variety of computers, peripherals and software. Software for IBM, Apple and Apple Mac includes business, communications and utilities packages, as well as games, flight simulator etc. Messages may be left and order frames accessed for obtaining catalogue or buying products. Prices are listed with most items and deliv-

ery by overnight courier is offered at nominal cost.

FISHNET NODE 590

Combined, public and closed user group (CUG) seafood marketing system operated by the Trawler Owners' Association of Australia (TOA). Public index currently contains an interesting variety of appetising seafood recipes and general information about retail supplies of seafood, venison and other game. Restaurant information is listed and members of the public may access the index frames of the CUG section, and those giving details of professional fishing vessels for sale.

MIDLAND BANK NODE 88172

Moves and trends in major world currencies. Foreign exchange spot rates, bank bill rates and a daily technical analysis of the Australian and U.S. dollar rates is provided. The index also includes market commentary, foreign currency options and forward rate agreements.

HOMESTEAD MOTOR INNS NODE 366

Comprehensive listing of Homestead's Australian motels and affiliated facilities over-

seas. Locations and tariffs are listed for all States.

Reservations may be made on Viatel and there is advice on how to obtain the Homestead accommodation pass. Details of facilities in rooms are listed and credit card bookings are catered for.

WESLEY CENTRAL MISSION NODE 38220

A history of the mission and details of their caring and pastoral services. The frames include bible discussion and study and give details of how you might help the Mission. Details of Christian television programs around Australia are included. For more information see article elsewhere in this issue.

TODAY'S COMPUTERS NODE 60013

Computer news items and product information from the publishers of Today's Computers Magazine. Items listed include the latest top ten in software sales, along with new hardware releases and pricing updates. Today's Computers is a Business Review Weekly Technology publication. Currently running a competition to win a \$9,000 business system.

NASHUA DISCS NODE 42427

This is a Nashua direct buying service for disks, hardware and software products and services. Mini and floppy disks are included. Other services offered include duplication and conversion facilities for over 400 formats; and high speed disk duplication. A brochure and ordering service is available.

TAB W.A. VIABET NODE 606

Information on different types of betting and

how the TAB in Western Australia operates. Some information is restricted to registered users but there is a great deal of advice about horses and courses for anyone who cares to browse. For more information on the W.A. TAB see the article in this issue.

PA CONSULTING NODE 550

An on screen opportunity to browse through executive positions available in a wide variety of disciplines, and fields of commerce, including marketing, distribution, engineering and many more. Specifications include an abstract of each position, location, and conditions package, etc. P.A. Consulting office addresses and contact numbers around Australia are also listed.

DOMINGUEZ BARRY SAMUEL MONTAGU NODE 88188

A financial and investment advisory service covering telebroking, the stockmarket, interest, bonds and foreign exchange. Company research and recommendations daily market reports and stock analysis and recommendations may be accessed separately. A telebroking demonstration is provided and the frames include a gateway service for price/yield calculations.

DBSM 88188a	
DOMINGUEZ BARRY SAMUEL MONTAGU LTD	
Investment Bank	
MAIN INDEX	
1 TELEBROKING (DBSM Clients Only)	21 Research Index
2 STOCK MARKET	24 Evening Report
3 FIXED INTEREST	32 Bond Market
36 TELECOM BONDS	35 Ray Block
4 FOREIGN EXCHANGE	41 FX Rates
5 MESSAGES TO DBSM	42 FX Commentary
6 TELEBROKING (DEMO)	
* Disclaimer	
* Telebank Index	
* MONEY WATCH Telebroking Index	

HOMESTEAD MOTOR INNS 366a	
Welcome to the HOMESTEAD Hotline	
HOMESTEAD	1 Australian motels
	2 Overseas hotels & motels (How to book)
	3 Reservations
	4 Accommodation Pass
	5 Contact HOMESTEAD
VIATEL	

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- Customisation of fonts/graphics/logos etc by single key stroke
- Bulk update protocols

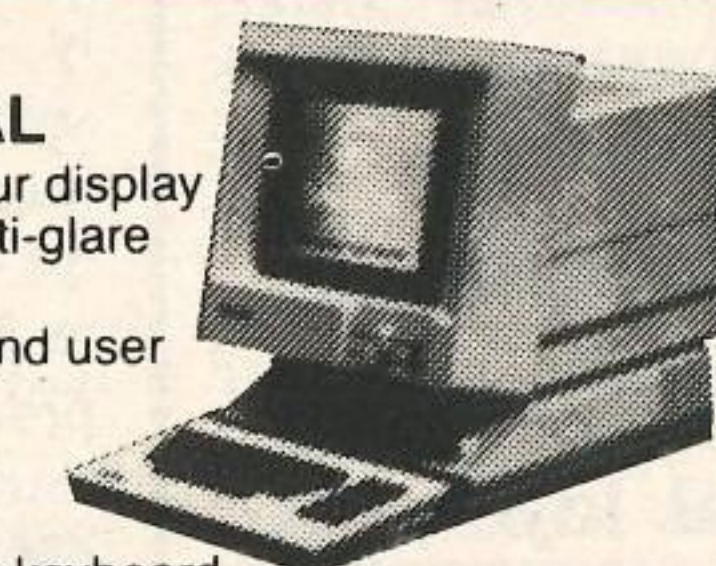
IB2000 PUBLIC ACCESS TERMINAL

- Free or coin operation
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- Automatic log-on and downloading of advertising frames
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Phone: Bruce Hall
(03) 61 3541 Telex 34732

Brisbane, Unit 1, 139 Sandgate Road, Albion, QLD. 4010
Phone: John Sullivan
(07) 262 8366 Telex 43396

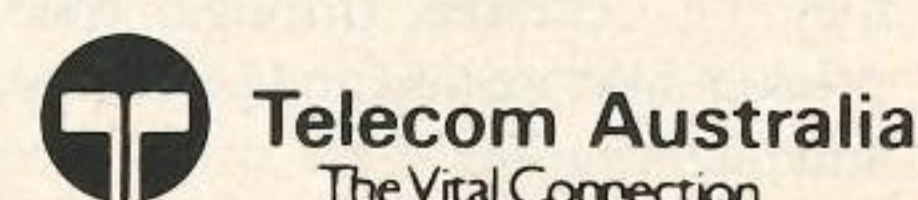
Adelaide, 34 King William Street, Kent Town, SA. 5067
Phone: Bruce Linn
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- ☐ IE5000
☐ IE10000
☐ SALORA VTX2000

- ☐ IB2000
☐ IE6000

NAME

POSITION

LOCATION

PHONE

VIATEL — NOW YOU CAN BET ON IT

Viabet - A Tab Strategic Product
by Richard Brisbane-Cohen *

The Totalisator Agency Board of Western Australia has been involved with on-line technologies for over a decade, and has always viewed, with enthusiasm, new technologies which could enhance its business. The Board has kept up research within its own ranks, and has promoted creativity as much as possible amongst its staff. It also has been a keen supporter of the self-service concept of its betting products, and helped pioneer the use of mark-sense reading betting terminals, which have been accepted as a worldwide technology standard within the off-course betting industry.

The self-service medium of videotex is seen by the Board as a strategic technology, and as such, has put in a lot of effort to make it as acceptable to the betting public as possible. Its biggest attraction is its simple, easy-to-use menu driven presentation with the use of colour graphics and relatively inexpensive terminals. This makes VIABET potentially attractive in the home entertainment marketplace.

Research into the available videotex technologies began in earnest in July, 1983. At that time we knew of a few private videotex systems around the world using IBM Series/1 computers, and our investigations showed that we could economically convert some of our units to run a supplied package in-house. Our plans progressed along these lines for a few months, until Telecom announced that the federal government had given permission for them to provide a public videotex network.

We see an advantage in using Viatel, because Telecom's Australia-wide network is best placed to provide a low cost networking solution with the broadest possible market base. Since the Board has always endeavoured to provide similar services throughout the State, regardless of distance, Telecom's nationwide, same-cost approach to subscribers, made them the logical choice as our major videotex supplier. So began serious consultations with the Viatel management team in the middle of 1984.

The analysis of the information needed for this new medium was fairly intense, and a small team of TAB staff formulated the basic system requirements for a pilot test. Approval of the project was given in October, 1984, after testing, and simulated demonstrations.

Our information delivery system was divided into three parts, based on their technical requirements. Those were General Information, Racing Information and Betting. Technically they are considered as information that is generally static, dynamic and interactive, respectively. The betting facility had to be the priority task, although we felt that an early presence on Viatel was important. Our early presence on Viatel resulted in a large number of enquiries and this has helped us to plan our administrative procedures. We then began gathering the General Information data about our industry, which included the locations of agencies, some policies of The Board and various items of information that changed infrequently. We did not want to create a massive administrative nightmare that required a team of people continually updating information, so this information was carefully vetted.

We collected static racing information such as the physical layout of racetrack and preferred barrier draws

and loaded them onto Viatel in readiness for the Telecom Viatel launch on 28 February 1985.

During this initial, data gathering stage, we found that using the generally available editing keyboards for text frames was very tedious, and particularly time consuming. Telecom provided a bulk-update facility and with it we accelerated our bulk-update programming project, carefully constructing the hierarchical framework for all our pages of information and providing as much future flexibility as possible. Using the bulk update facility, we were able to send the frames from our IBM compatible mainframe directly to

the Viatel computer in time for the Telecom launch. We named our videotex service and the betting facility, VIABET.



* Richard Brisbane-Cohen is the Computer Services Manager for the Totalisator Agency Board of Western Australia.

The interface software for Bulk-update at that time was not very sophisticated but it at least allowed us to maintain the loaded data easily. The Bulk-update software was progressively integrated into our raceday system and improved over the next few months while we waited for the Data Processing Gateway to become available from Telecom. This proved the most efficient method for transmitting and receiving variable, interactive data between our respective computers. It differs from the alternative method of transmitting fully formatted frames through the network, which, because of the additional quantity of data, takes longer to transfer.

We began work seriously on the Data Processing Gateway link in July 1985 using the AUSTPAC service on the Telecom testing system, and faced numerous problems in interfacing the IBM 3705 Communications Controller to the X.25 Telecom network. The interface was finally ready for pilot testing in mid October 1985, and on December 10 a few trial customers began placing bets, using their current betting accounts.

The first generation of betting frames was fairly basic but within a few weeks, our trial customers had outlined a good, general structure of workable pages for their betting. We

spent a great deal of time liaising with these users and believe that we now have a set of easy-to-use frames, with sufficient 'help' information, for this interactive application. Efficient software design gives our customers the best response times possible using the videotex technology.

The final phase of the VIABET project was to provide the Dynamic Information using the Bulk-update facility. This information includes Future Events, a variation of the presently available results and dividends, fields (including scratchings, jockeys or drivers, etc.) and non-interactive provisional dividends. All of this information is already available on our computer, and Viatel is an excellent delivery mechanism. Some of this information will be freely available to the public, but the more explicit racing and betting information will be accessible only by members of our Closed User Group, the VIABET account holders. The final phase of the VIABET project is expected to be completed by mid 1986.

Information Available on VIABET

The General Information section describes the various Western Australian bet types, e.g. Win, Place, Quinella, Sweepstakes etc., and the requirements for placing those bets. It also has an alphabetical search for agencies in different towns and suburbs throughout the State. Some particular dividend policies are explained to keep our customers fully informed. A small section provides a brief summary of the The Board's objectives and it is intended that we show a plan detailing future developments for this product.

Under Racing Information, we show forthcoming fixtures and future events and start names and riders. Track and barrier in-

formation is also displayed in this section.



VIABET account holders can access Tote Information which includes provisional dividends,

and results with final dividends. A full explanation of the betting formats is given under this section to provide a 'help' facility to our betting customers.

The VIABET section has two betting options, one for those with limited VIABET experience, which provides prompts throughout the betting process, and a FAST-BET facility for our more frequent and experienced clients. A display of transactions is available for the customer to check his or her progress in various formats, and finally, customers can automatically generate a request for cheque withdrawals from their account, which will automatically be printed and posted the next working day.

There are a number of prompts throughout the system which allow the customer to send messages and request further information. The VIABET product has been designed for high volume usage, and we expect a relatively long growth path for this service, as more and more Australians begin to use the service. We intend to continue to provide enhanced dynamic information for our customers, and future possibilities include electronic funds transfer facilities for our account holders, access to tipping services, form guides and other industry allied services. Enhancements will be addressed from information and suggestions we hope to receive from customers over the next few years.

Technical Comment

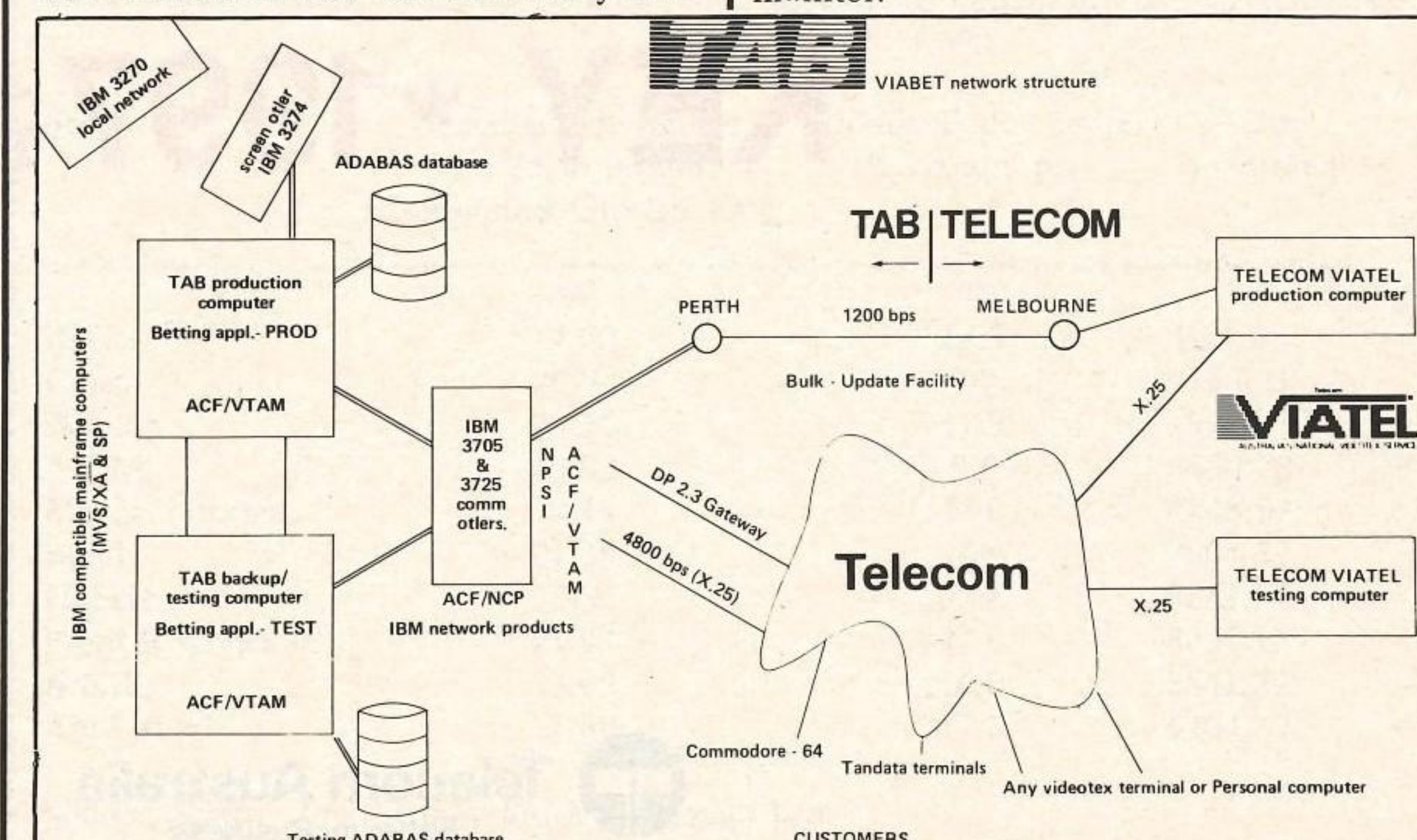
The Bulk-update facility in its present form allows us to retrieve messages sent to us, as well as to construct full graphical frames on our IBM 3270 based Management Information System. These pages are built by programs written in the Natural Language (Fourth Generation), and reside in an ADABAS database. These products help us streamline the administration procedures for



L to R: Richard Brisbane-Cohen, Computer Services Manager WA-TAB; Sharon Brown, Telecom Computerphone Demonstrator; Pam Beggs, Minister for Racing and Gaming; Des Carpenter, General Manager WA-TAB; Lyn Thomas, Telecom Accounts Manager.

handling new customers, and the dissemination of information on our products. We believe we are the first Totalisator operation to use this mechanism at present but we are sure that this inexpensive, friendly medium will catch on over the next few years.

The communication from our IBM MVS/XA and MVS/SP operating system uses ACF/VTAM and IBM 3705/3725 communications controllers running ACF/NCP and NPSI, the packet switching interface with an in house exit routine that allows the logging onto multiple applications. We use CICS as the application driver and TP monitor.



QUERIES? QUESTIONS? PROBLEMS? SOLUTIONS?

V I A T E L

1997a


0c

WHO, HOW & WHERE GUIDE

- 1 WHO do I complain to?
- 2 HOW do I contact Viatel?
- 3 HOW do I use Viatel properly?
- 4 HOW do I report a fault?
- 5 WHERE can I find what's on Viatel?
- 6 WHERE can I go with a general query?
- 7 WHAT is the Viatel Directory & User Guide?

◇ HOW TO USE VIATEL

KEY *1997#

 **Telecom Australia**
Better for Business

MAGAZINE

TELEBROKING ON VIATEL DEMYSTIFIES THE STOCKMARKET

by Gavin Randles *

McIntosh Hamson Hoare Govett Ltd., one of Australia's leading stock-brokers, provides a service on Viatel that enables clients to follow the stockmarket, provide access to McIntosh's research database, and to place orders to buy and sell shares twenty four hours a day, seven days a week. The service, known as Telebroking, breaks down the remote aura surrounding the stockmarket and enables clients to invest in listed shares from their own homes or offices, basing their investment decisions on the same information that to date would only have been available to an institutional fund manager.

Historically, the Australian public have had little direct participation in the stockmarket. This has been due to a number of factors, including the dominance of the industry by the financial institutions, lack of dissemination of information relating to stockmarket investment, and the widely held but erroneous view that investing in shares was a form of gambling. Investors were said to act on 'hot tips', and to buy stock was to 'take a punt'. This view of the stockmarket might be appropriate if the only shares available for purchase were in an oil exploring company that used its shareholders' funds to drill rank wild cat wells, but is totally incorrect when considering the purchase of blue chip stocks such as shares in Coles-Myer Ltd. or the ANZ Bank.

The following table shows the change in compound growth rate and the annual growth dividends for leading industrial stocks over the period 30 June 1975 to 30 June 1985. The column on the far right shows the current value of \$1000 invested at the start of the period. The results should help to discredit the 'gambling' theory, and reveal that investment in shares can combine the elements of profitability and security.

McIntosh Hamson Hoare Govett Ltd., believe that its Telebroking service will help reverse the historical trend of low private client interest, by bringing the stockmarket

within reach of a greater number and range of people. Wherever one can access Viatel, one will be able to follow the stockmarket.

Telebroking, like Viatel, will be easy to use and will not involve large access expenses.

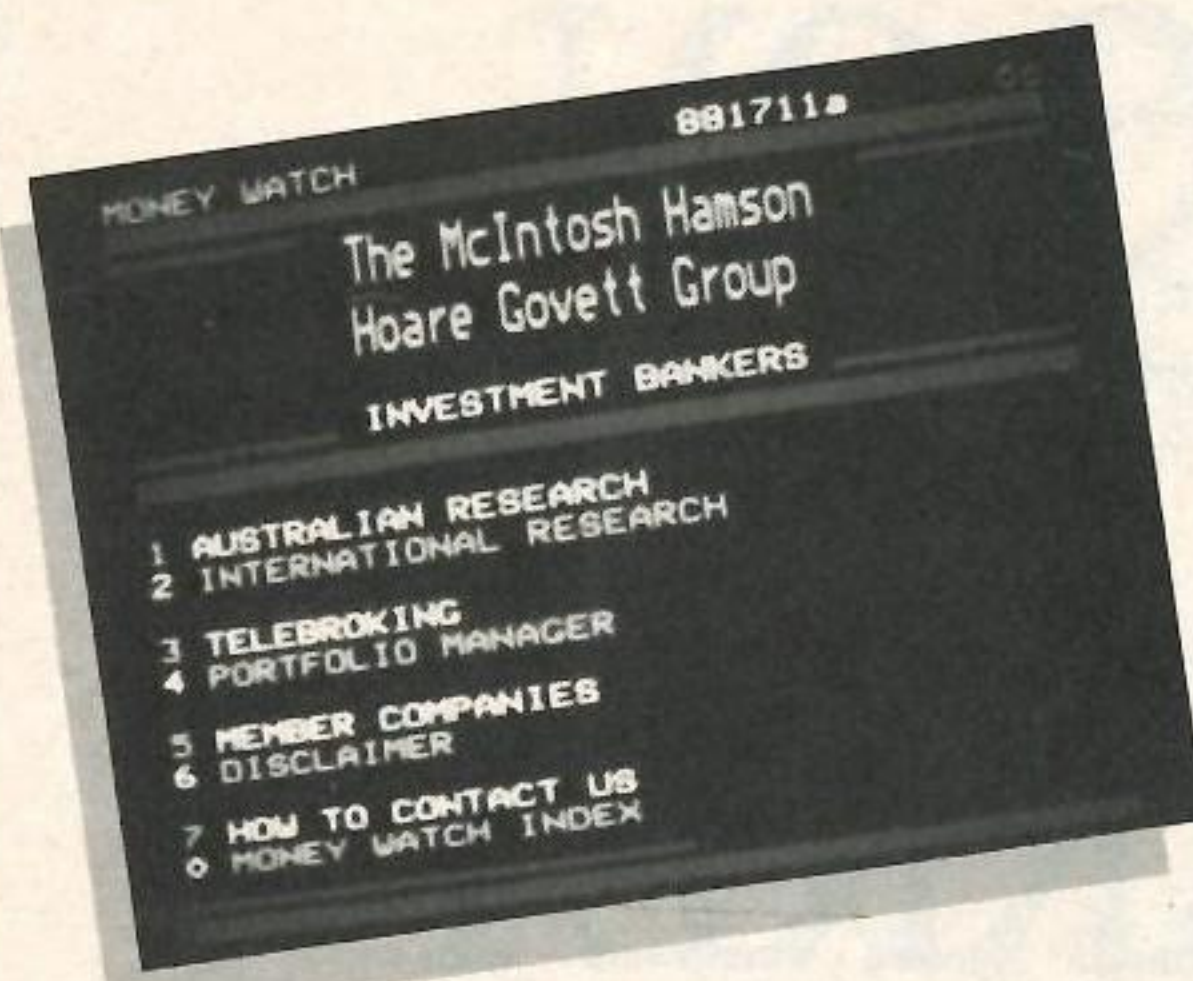
Telebroking clients will have access to Moneywatch, the Fairfax/Syme videotex service which provides business news, stock market reports, share prices, and overseas market reports. Moneywatch will be supplemented by company reports and economic commentary from McIntosh's research department. This information will include daily, weekly and monthly stockmarket reports, and detailed reviews of major listed companies. These reviews analyse not only a company's past performance, but give the research department's forecast of future performance, and a recommendation of whether to buy, hold or sell the shares. Furthermore,

the company reviews will be continuously updated in order to keep abreast of developments in either the company or the industry in which it operates. When an investment decision has been made, Telebroking clients will be able to place an order in the share ordering page which can be sent immediately to McIntosh's offices from almost anywhere in Australia, and acted upon promptly, or the next time the market is open.

Judging from the experience of McIntosh's equity holder, Hoare Govett, Telebroking will become widely accepted by the investing public. Hoare Govett is the largest stockbroker in the United Kingdom, and has offered a Telebroking facility as part of its private client services since 1984. Hoare Govett Telebroking is on Prestel, the British equivalent of Viatel. Hoare Govett reports the activity to be more than successful, totally justifying the cost of producing and maintaining the service. Further evidence of the potential of Telebroking in Australia is provided by Moneywatch, who recently reported that for the month of February 1986, the McIntosh Telebroking database was accessed almost 7,000 times. In the same month the number of Viatel subscribers was almost 11,000.

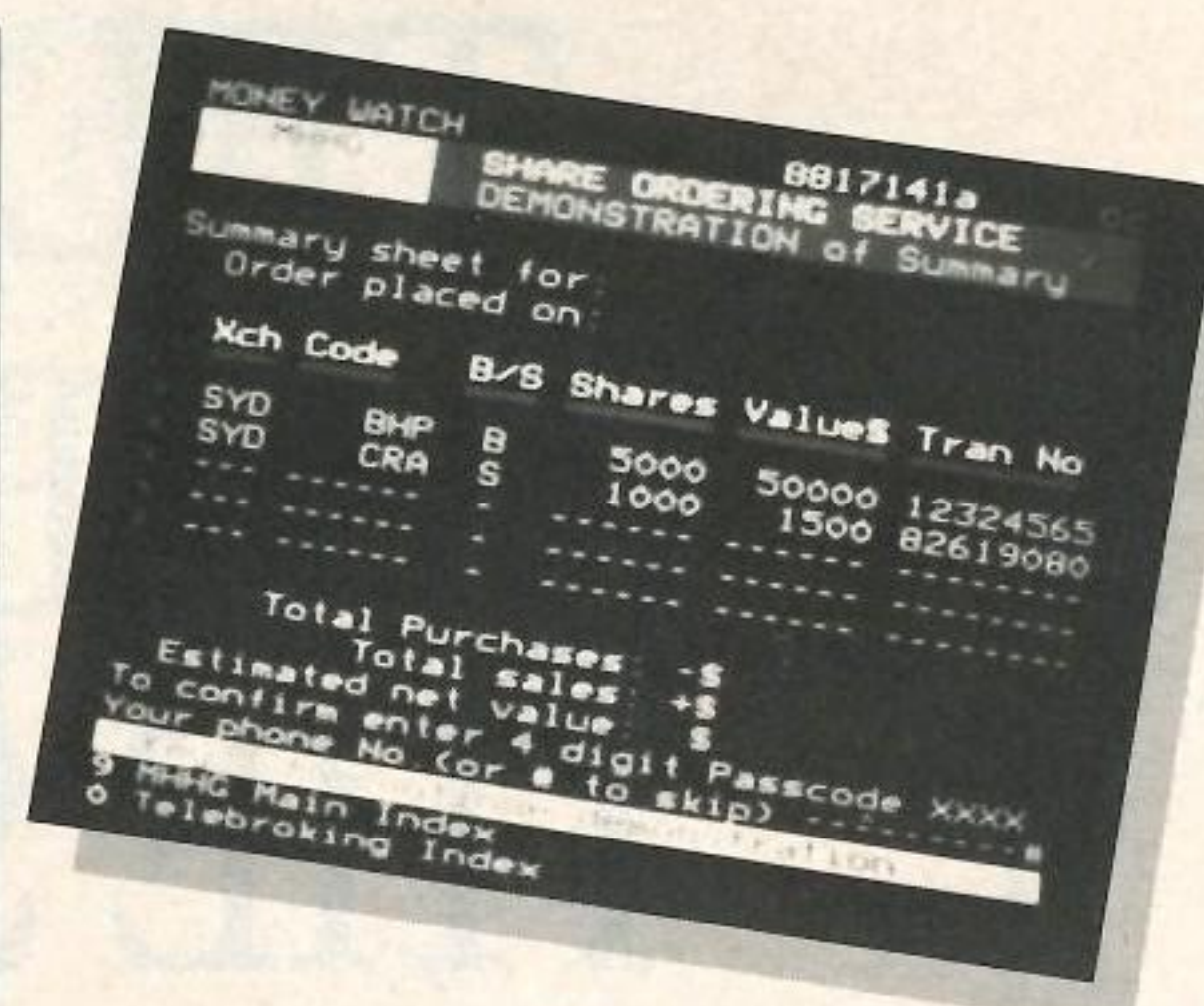
Stock	Percentage of Return 30/6/75 to 30/6/85 Compound Growth Rate	Dividend per Share % change p.a.	Value Investment
	%	%	\$
BHP	17.02	18.7	5121.05
Coles	20.84	9.7	7258.21
Dunlop	29.35	11.8	15460.50
A.P.M.	19.92	5.6	6680.78
Mayne Nickless	19.19	13.0	6248.57
Boral	21.35	14.8	7604.57
Hooker	23.53	22.6	9251.37
Pioneer Concrete	21.97	11.0	8037.15
A.N.I.	23.03	16.0	8841.22
ANZ Bank	17.60	17.6	5404.37

Source: Statex, The Sydney Stock Exchange Ltd.



a taxation advantage. The details of the scheme are yet to be released, but in essence dividend imputation means that for every \$51 received by the way of dividend income, there will arise a taxation credit of \$9. If the scheme is in fact introduced, and it appears to have the support of not only the Federal Government but also the Federal opposition, then the attraction of shares will increase dramatically. Given the abolition of negative gearing and the advent of a capital gains tax, an investment in shares will represent one of the few remaining tax havens for individual taxpayers.

In conclusion, McIntosh Hamson Hoare Govett Ltd., view their Telebroking service as a means to generate public awareness of the advantages of investment in the stockmarket. Currently only 4% of the Australian population hold shares. The availability of Telebroking on Viatel should increase pub-



lic participation by bringing the stockmarket closer to investors and their advisors.

* Gavin Randles, Retail Advisory Services, McIntosh Hamson Hoare Govett Ltd.

At the same time that Telebroking will be increasing the accessibility of the stockmarket, changes to the taxation system will be making investments in shares much more attractive. Under the proposed dividend imputation scheme, the Federal Government will be giving holders of shares

VIDEOTEX ACCESS MADE EASY — METROTEL'S MVIEW

With Viatel edging its way into Australian homes and business at the rate of over 1,000 new users a month, it is not surprising to find a surge of products on the market facilitating access to videotex systems.

Metrotel have joined the market place with a new product call MVIEW.

MVIEW is a software package suitable for use with any MSDOS computer. (IBM and IBM compatibles). MVIEW distinguishes itself from other videotex software in the marketplace by positioning itself as an easy to use videotex option that assumes no previ-

ous experience or knowledge of videotex, or an understanding of computer jargon and operations.

MVIEW's features include double/single height characters, coloured backgrounds, flashing text graphics, on line editing, local editing and page creation and a full off line data base of up to 8,000 frames.

Adam Salzer, Metrotel's Managing Director sees MVIEW assisting large companies, or firms with several operating locations to standardize administrative jobs by enabling people to easily program MVIEW discs, so that branch offices are encouraged to use the company's videotex database. MVIEW's off-line data base can facilitate in this usage. MVIEW comes complete with an instructional disc. The package is distributed by Metrotel and is available from most leading computer shops. The package retails for \$250.



CONNECT WITH THE FULLY FUNCTIONAL MODEM/PHONE FOR ONLY \$399

inc. tax



The Interlink M-12/75 modem offers PC users remote data base access - at a new, low, affordable price. But don't be misled by the price tag; the M-12/75 is a fully functional modem offering asynchronous full and half duplex communications in both the CCITT international standard and Bell American standard, plus a free videotex software package enabling Apple* and IBM* compatible PC's to receive, save, and print videotex data from any standard videotex base.

A glance at the M-12/75's features makes it easy to compare with modems costing over \$300 more:

- ☐ Asynchronous full and half duplex
- ☐ Bell 103/202, CCITT V.21/V.23 standards
- ☐ 300bps full duplex; 1200bps half duplex
- ☐ 1200/75bps videotex receive standard
- ☐ 75/1200bps reverse videotex (upload mode)
- ☐ Frequency shift key operation

- ☐ RS-232 interface (EIA standard)
- ☐ Telecom & SEC approved

The Interlink M-12/75 is not just a functional, state of the art modem, it is elegantly, ergonomically designed to fit in with any office environment. All standard user communication modes are accessed by two simple-to-use slide switches located on the angled front panel, next to the mode indicator lights. You just set the baud rate, dial your number, flip a switch when the data base answers, and that's it - as quick and simple as so-called fully automatic models costing much more.

SYSCORP

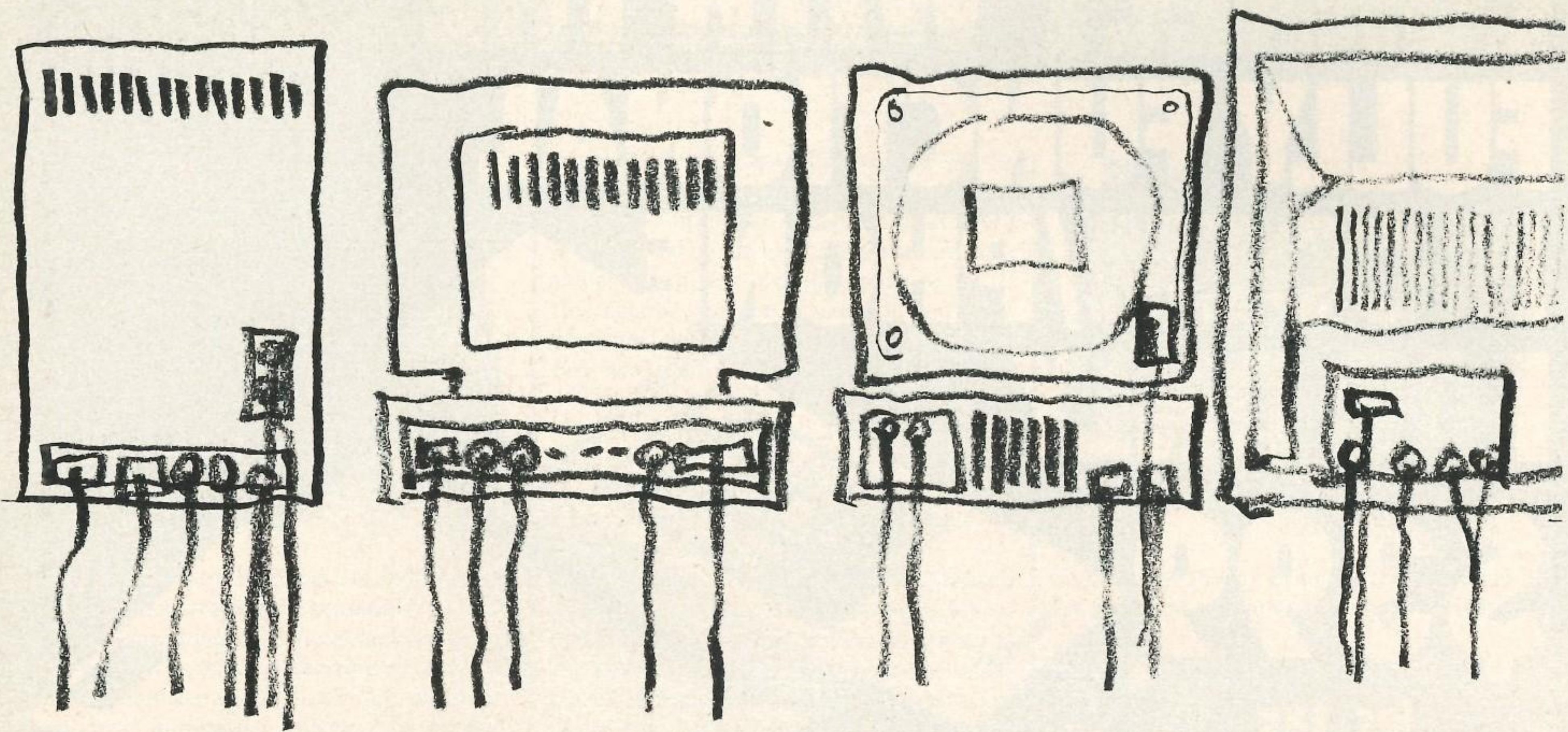
THE INTERLINK 12/75 MODEM

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Telephone (02) 908 1599

SYSCORP (VIC) PTY. LTD.
Level 2, 969 Burke Road,
Hawthorn, Vic. 3122.
Telephone (03) 813 3122.

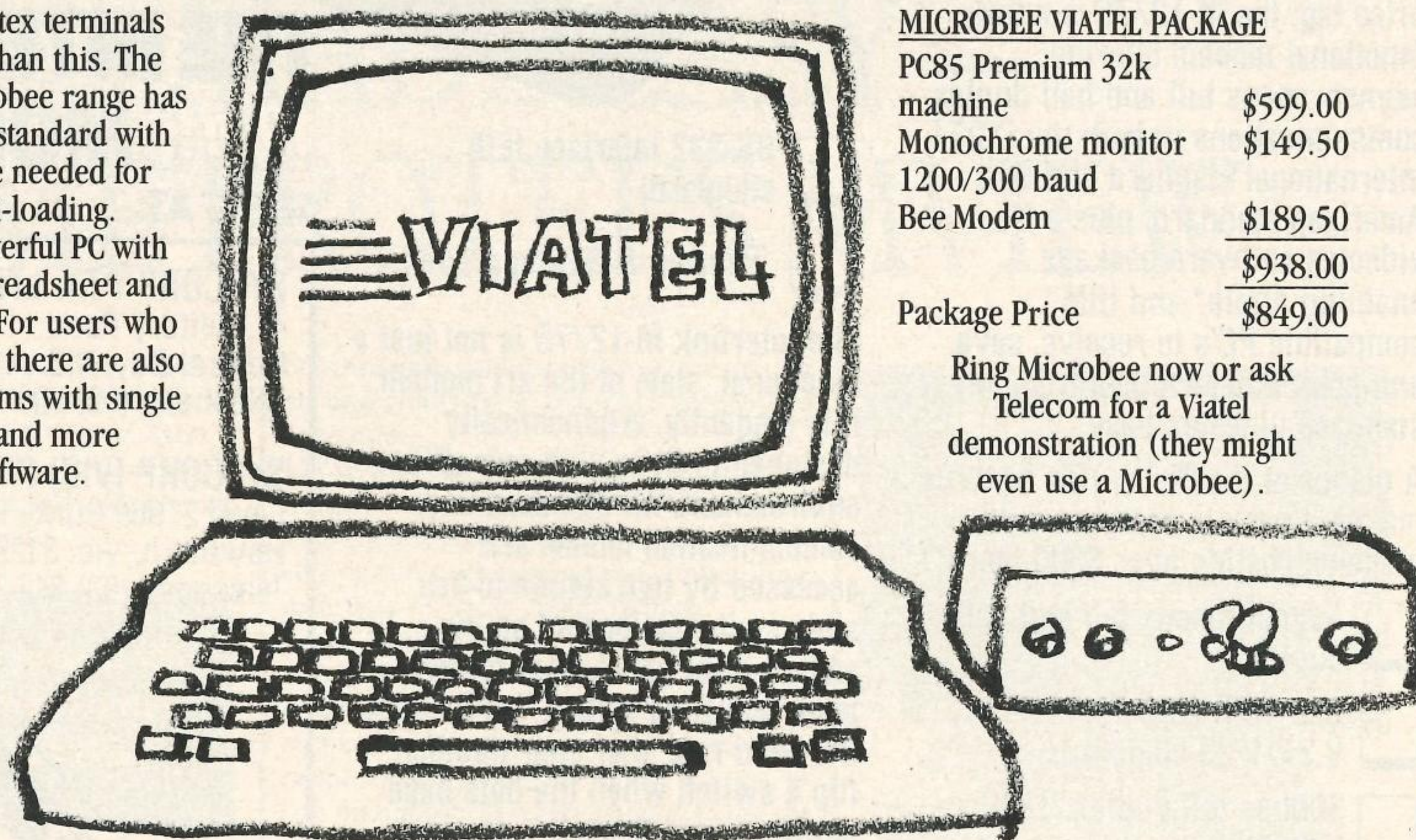
FREE VIDEOTEX OFFER
When you buy the M-12/75 modem for only \$399 you will also receive, absolutely free of charge, a software package giving videotex capability to Apple* and IBM* compatible PCs.
*Apple and IBM are registered trademarks of Apple and IBM respectively.



See what it will cost to upgrade your PC to Viatel.

Then buy this Microbee package for \$849 and keep the change.

Many Viatel/Videotex terminals cost much more than this. The new Premium Microbee range has Viatel/Videotex as standard with no extra software needed for software down-loading. You also get a powerful PC with wordprocessor, spreadsheet and database software. For users who need more capacity there are also 64k and 128k systems with single or twin drives and more advanced software.



MICROBEE VIATEL PACKAGE

PC85 Premium 32k machine	\$599.00
Monochrome monitor	\$149.50
1200/300 baud Bee Modem	\$189.50
	<u>\$938.00</u>
Package Price	<u>\$849.00</u>

Ring Microbee now or ask Telecom for a Viatel demonstration (they might even use a Microbee).

(Think of it as your Viatel access with a PC thrown in free)

Sydney (Waitara) (02) 487 2711,
Sydney (North Ryde) (02) 888 9866,
Newcastle (049) 61 1090, Melbourne (03) 817 1371,
Perth (09) 386 8289, Gosford (043) 24 2711,
Brisbane (07) 394 3688, Adelaide (08) 212 3299.

microbee
Microbee Service Provider 225

MAGAZINE

WHAT MICROTEx 666 HAS ON OFFER FOR THE PC USER

Stephen Withers *

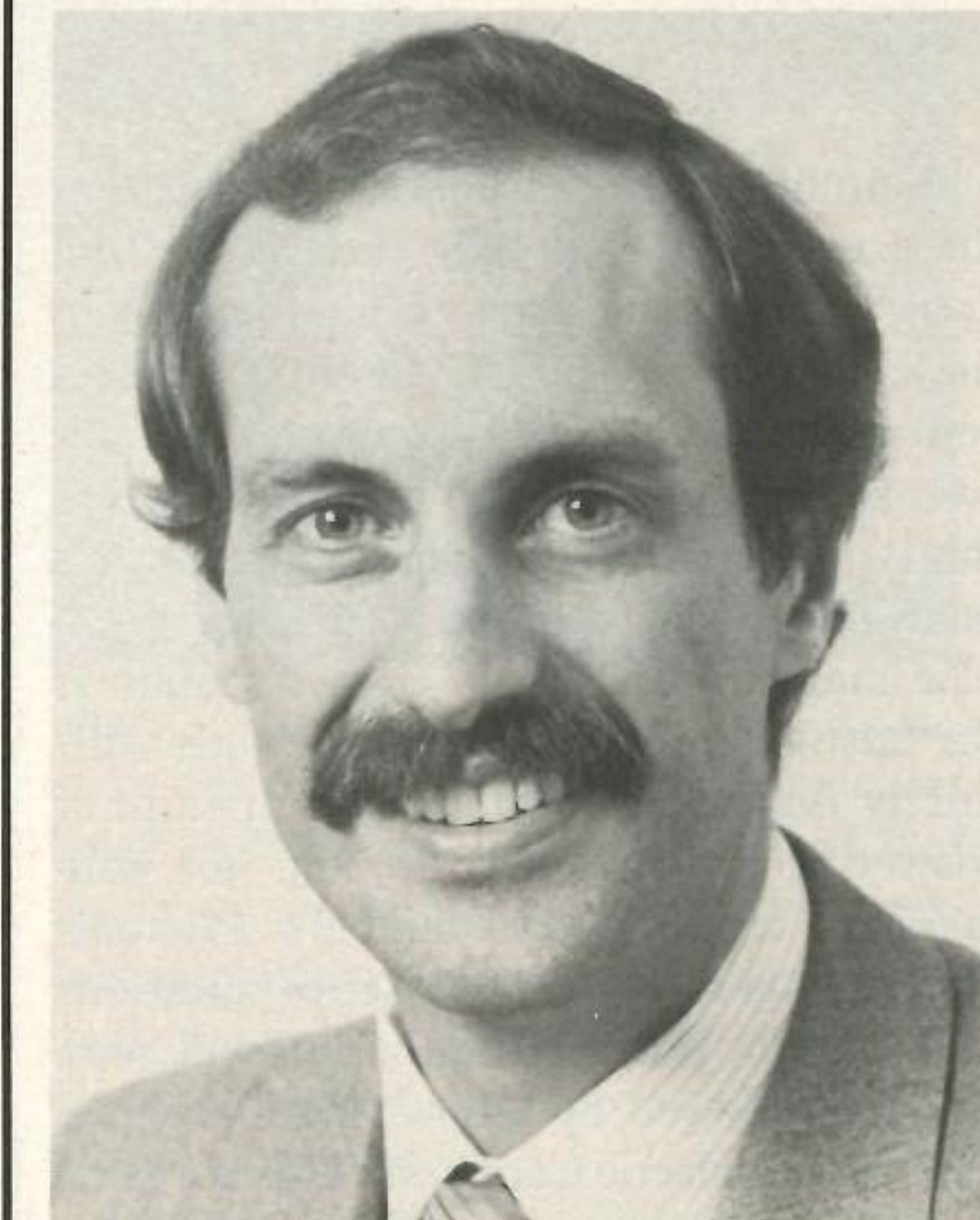
Microtex 666 is one of Viatel's original Service Providers and the only one to cater specifically for users of personal computers. This does not mean that the 666 pages are only of interest to computer freaks - several areas have wider appeal.

The section of broadest interest is Trading Post, an electronic equivalent of the classified advertisement columns in your newspaper. Originally intended as a forum for business and home users of microcomputers to buy and sell programs and equipment, it attracted such a wide range of advertisements that computers account for just two of the 15 classifications. The remainder are as diverse as videos and boats, or furniture and cars. Through the Trading Post, Viatel subscribers have been offered \$50,000 blocks of land in Queensland, a list of dozens of two-letter words (for Scrabble enthusiasts), and paintings that appeared in an exhibition that recently toured Australia. No charge is made for viewing these frames, but sellers pay \$2 if the value of the goods does not exceed \$100, or \$4 if they do. 'Wanted' advertisements can be placed for a flat fee of \$2.50.

The majority of Microtex 666's departments are aimed squarely at the computer user. For many, the centre of interest is the telesoftware library. The term 'software' is used to indicate that the functions performed by a computer can be readily changed by loading a different program, while the computer itself (the 'hardware') remains unaltered. The prefix 'tele' - as in telephone or television - simply means distant. The conventional practice is to distribute computer programs on magnetic disks or tapes, but with the appropriate equipment, subscribers can transfer (or 'download') programs from the library into their own computer, saving a copy on disk or tape.

Several of the 300 programs in the library are in the public domain, an expression

meaning the programmer has effectively waived the copyright to the program, thus allowing it to be used and reproduced freely. In such cases the charge made by Microtex is a nominal one to cover the costs of loading the program into the library and keeping it there.



Scott Sanderson, Director of Information Solutions P/L.

A growing proportion of the programs come from the pages of Australian Personal Computer magazine. Here the charge for a significant program is usually around \$2 which is quite reasonable considering the effort involved in typing in a program of several hundred lines from a printed listing. The final category consists of commercial software, i.e. programs intended for sale. The traditional method of distributing software involves significant expense in the production, storage, and shipping of disks and tapes, with the risk to the trader of being left with unsold stock. Telesoftware costs are far lower, and so subscribers can acquire commercial programs through Microtex 666 at prices

well below retail. At present, the telesoftware library caters for the Commodore 64, BBC, Apple, and IBM computers. Microbee and Sega programs will be added in the near future. The programs themselves include games, educational and business applications, and the utilities that are so appreciated by users as they make up for the deficiencies often found in computer systems. Many computer users prefer to write their own programs, and Microtex 666 has something for them too. The Technical Information area offers a range of hints and tips for programmers (with a frame charge of two to four cents), plus a 'question and answer' department where users can pick each other's brains. The area also includes a list of computerised bulletin boards around the country and overseas. These bulletin boards are generally operated as a hobby by individuals or by computer clubs as a service to their members. Such a bulletin board consists of a microcomputer running a program that allows people to leave messages for each other. Communication is by telephone (in much the same way as subscribers connect to the Viatel computer). Some also have an equivalent of Microtex 666's telesoftware library, although the technical details of the downloading process are very different.

Microtex 666 includes nine bulletin boards; one is available to all Viatel users, and the other eight are for Microtex 666's subscribers only. The big difference between Microtex 666's Blackboards and bulletin boards provided by other Service Providers currently on Viatel is that there is no human intervention. Subscribers type their messages into response frames which are collected by the Microtex 666 computer. At intervals the computer filters out any obscenities and loads the messages onto normal Viatel frames. This updating occurs every 15 minutes during peak periods (Monday-Friday evenings and throughout

Viatel 'free time' and hourly on Saturday and Sunday evenings.

Microtex 666
subscribers can post
messages to the
members' Blackboard
without charge.

As the non-members' board is open to all a levy of 15-8c- per message is made. The remaining board is called Debate 666, and the intention was to involve Microtex subscribers in a series of debates on a range of topics. In practice, the formal motions have been largely (but not completely) ignored, while participants ride their particular hobby-horses. A recent motion in the computing debate was that 1986 will be the year of Forth (a particularly idiosyncratic programming language), but the majority of the messages discussed the relative merits of certain popular home computers! Viatel subscribers that think about things other than computers will be relieved to hear that the majority of the debates are on completely different topics.

Games and Gametalk provides an information service about computer games as well as a selection of games and puzzles that may be played on Viatel. Subscribers are invited to submit reviews of games they have purchased.



Adventure games are popular with many home computer users. In such games the player must 'act' the part of the main character in a plot that may be taken from detective or spy thrillers, science fiction, or the realm of fantasy. Success in such a game generally results from solving a number of puzzles and locating one or more objects. Such puzzles draw on a wide range of source material. How would you deal with the Cyclops if he blocked your way? In one game the answer is to mention the name of a mythological person who got the better of him.



The problem with adventure games is that there are often key points (such as a locked door) that must be mastered in order to continue, and sometimes the player simply becomes stuck. Gametalk's question and answer section is dominated with questions of this type, but there are others concerned with many aspects of computer gaming.

The main feature of the Games section is the Australian Inquisition, a quiz with a distinctly Australian flavour. Each attempt at answering a question costs 3-8c- for non-members and 1-8c- for members. Microtex 666 intends to pose a new set of questions each month, but the Inquisition will soon be overshadowed by a new flagship game, The Great Galactic Conquest. This is a game of colonisation in a science fiction setting with a \$5000 prize for the victor.

Returning to the serious side of computing, Microtex 666 presents three news services. Point Reports are compiled each working day by the staff of Computing Australia (the controlled-circulation news weekly) and provide up to date news items of interest to the personal computer community.

Australian Personal Computer magazine is the source of Newsprint and Yankee Doodles. Newsprint is a blend of material culled from press releases and gossip comment, while Yankee Doodles is a monthly look at the US personal computing scene. These articles generally appear in Microtex 666 before the relevant issue of APC goes on sale. Back issues and subscriptions to the magazine can be placed through Microtex 666.

The Microtex 666 subscription fee of \$49.95 gives the personal computer user access to a range of services at little or no additional cost, while non-subscribers can use a limited range of facilities (sometimes on a pay-by-use basis).

* Stephen Withers is a personal computing consultant. He is also consultant editor of Australia Personal Computer.

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- Electronic messaging terminal

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for a demonstration
*For the cost of a local call

Telecom Australia
Better for Business

TENDERTEX — A BOOST FOR AUSTRALIAN BUSINESS

Australia's trade balance is ever increasingly in the red and innovations like the Tendertext system which represents the use of modern technology and up to date information will assist Australian businessmen to open up new markets and help turn the trading situation around,' so stated Deputy Prime Minister, Lionel Bowen, at the launch of Tendertext in Sydney recently.

The system, Tendertext, is an electronic publishing service designed to give instant access to tenders worldwide. It is the first such service dealing exclusively in tenders and is the brainchild of Sydney based company, International Trade and Tenders Pty. Limited. It is believed to be a unique service and was created following worldwide surveys of systems including British Prestel and French Teletel.

Tendertext was initiated to overcome a major problem of the monthly print publication, 'International Trade and Tenders.' Chairman and Managing Director of International Trade and Tenders, Mr Ron Moreland, says 'because of our lead time a high percentage of tenders were out of date or almost out of date by the time we reached our deadline. Now the information is instantly and constantly available.'

Emphasising the importance of 'trading well and making a profit' at the launch, Mr Bowen said, 'Australia subscribes substantial sums of money to the World Bank and Asian Development Bank and these organisations then distribute that money across the world to needy countries who in turn call tenders for projects.'

'In the past, because of distance and availability of information, Australian companies haven't been able to avail themselves of the opportunity to bid for most of these tenders. But now Tendertext, has changed all that,' Mr Bowen said.



Deputy Prime Minister, the Hon. Lionel Bowen, and Mr Ron Moreland, Chairman and Managing Director of International Trade and Tenders, at the Sydney launch of Tendertext.

Tendertext subscribers have access to tender details in every conceivable type of activity including tenders put out by the U.S.A. Defence Department.

Tendertext has set up a very thorough tender gathering team to bring in tenders from all over Australia and the world. They communicate via telex and facsimile on a 24 hour basis. They are fed into the Tendertext computer centre and from there directly into Viatel. The input averages some 500 tenders a day with closed tenders deleted daily. Tendertext will soon have a data base of 5,000 to 10,000 tenders worldwide at any given time. Subscribers have access to Tendertext information 24 hours a day, seven days a week and all of the tenders are coded into the Australian Standard Industrial Classifications. Each contract tells the viewer the closing date of the contract, when the contract was inserted, a brief description of what the tender is about and who to contact for further information. As Tendertext is a vehicle

for information and does not handle any tenders itself the subscriber can then make direct communication with the people who put out the contract. So, what does this exciting new business service cost?

First of all there is no charge for any of the information until the subscriber decides the category wanted (e.g. shipping). Once the category is decided, Tendertext shows all contracts available in that category for a charge of 10¢ a page.

To become a subscriber to Tendertext is \$285.00 per year. For that the subscriber gets entry to the closed user group which enables 24 hour access to Tendertext, plus:

- Eleven issues of 'International Trade and Tenders' with each issue giving an overview on other countries;
 - An additional publication which contains approximately 200 pages covering contacts in 50 countries with the potential to handle a further 100 countries. This comes out every four months as an updated trade and contacts supplement to 'International Trade and Tenders';
 - Subscribers can also set their own tenders into the system at no further cost.
- Tendertext can be found at node 7680.

TO CHANGE YOUR PERSONAL PASSWORD

*920#

Telecom Australia

A MISSION FOR GOD

Initially, it seems a little strange to see the Wesley Central Mission in amongst the Service Providers on Viatel. But, the Mission is no stranger to electronic media, with its own radio program on 2GB in Sydney and a television program broadcast on Channel 9 on Sunday mornings. Mr Stuart Storrar, the Director of Financial Development for the Mission was behind the move on to Viatel.

Mr Storrar believes that the Mission has something to offer for all people not just the aged and homeless.

The Wesley Central Mission and Viatel



The Wesley Central Mission at work — caring for the aged at their Lottie Stewart Hospital.

The data base located on page 38220 comprises forty pages of information on the Mission's caring services for children, the aged, the homeless and disabled persons, as well as information and contact numbers for its Lifeline counselling service. In addition the data base includes a history of the Mission, pastoral services information and studies from the Bible.

In the few months that the Mission has been on-line requests have been received from Viatel customers asking for advice on caring for aged parents, personal problems and spiritual matters.

Mr Storrar sees the Mission as helping to meet both the spiritual and physical needs of Viatel customers.

For the future, the Mission plans to branch into teleshopping, with its mail order division offering religious education products for sale. It is also planned to link the Mission's 44 caring centres through Viatel by using a gateway linked with the Mission's IBM System 36.



The Wesley Central Mission in the heart of Sydney, a 'Church-in-a-Theatre'.

Now you can place
an order to buy or sell shares
24 hours a day, from anywhere
in Australia, for the cost of a local phone call.

WE CALL IT GOODE TELEBROKING.

Here is what you get —

1. **Goode News:** A comprehensive sharemarket report and recommended short term investment strategy.
2. **Goode Advice:** One-frame summaries and recommendation on many popular stocks.
3. **Goode Telebroking:** place buy/sell orders 24 hours a day. Closed User Group ensures absolute security.
4. **Goode Research:** A nominal charge gives access to extensive and experienced stockmarket Research.

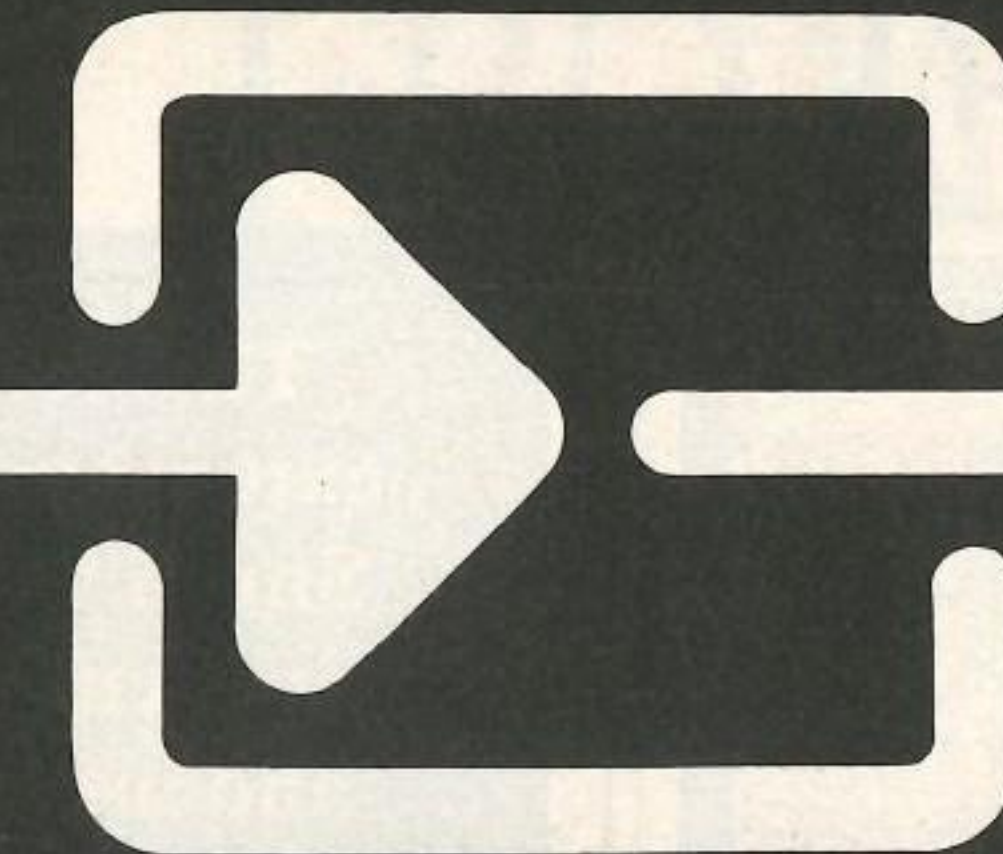
For more information why not send us a message on Viatel, Frame No. *880884# or phone Roy Fallon (03) 607 9600.

**A C
GOODE
& CO LTD**

Viatel *8808#

TWACG912

**VIDEOTEXPERIENCE
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**In Videotex, one name says it all...
...Philips**

It took imagination to create them; it took experience to link them to existing systems.

In a country as vast as Australia, efficient communication has always been essential for survival and growth. That's why at Philips we've used our imagination to create a better range of Videotex terminals.

Because it's Philips — you have the benefit of our vast local and international experience in Videotex.

Because it's Philips — you will have a range of terminals from which you can select the one to suit your particular needs.

Because it's Philips — you know that all our equipment has quality built in, and comes with Australia wide service back up.

Because it's Philips — you know that we will give you continuous personal assistance in making your decisions and will deliver what we promise. ... and, Because it's Philips.

you know that in 10 years time we will be here when you need us.

If you would like any product information, please call Doug Meek at Philips Communication Systems Limited on (02) 888 8222



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PHILIPS

DICK SMITH ELECTRONICS ON VIATEL

As a company vitally interested in high technology it is not surprising to find Dick Smith Electronics on Viatel. Dick Smith Electronics has almost 200 pages on the system as a sub service provider through Cable Shop. Much of the Dick Smith database contains their extensive catalogue of products — providing an interesting teleshopping service. Along with product information, the data base includes a data information section providing useful information for their entire customer base be they computer buff, electronics enthusiast or hobbyist. The data covers a wide range, from information on resistor colour codes to transmission frequencies throughout Australia. For the computer user, there are listings of all products available and an information service which includes such items as how to wire a printer to a computer.



This service is an extension of the Dick Smith 'Hotline' and gives customers help and information 24 hours a day, 7 days a week.

In the not to distant future Dick Smith intends to extend its services on Viatel to offer training on all seven of its computers, list all user groups for its computers and expand the data section to include lessons and information on the latest products. Dick Smith Electronics can be found at page 34572.

THE COMMODORE VIATEL ADAPTOR

by Gary Allen

For Commodore Computer users VIATEL can be very simply accessed using the new Commodore VIATEL Adaptor.

The adaptor which includes a built-in modem is attached to the cartridge port of the Commodore computer and plugs directly into a standard telephone socket.

With the adaptor attached, the computer wakes up in the VIATEL mode displaying an off-line menu so the user can select, by pressing the appropriate function key, the storage device (tape or disk), go on-line to VIATEL, select a stored frame, or return to the Commodore Basic operating system. Once the connection to VIATEL has been

established, the selected information can be

The Commodore Viatel Adaptor in use.



displayed by simply keying the appropriate number. The (return) key has been redefined as the (#) key thus reducing the number of key strokes needed to access a VIATEL page. Storing of a frame to disk is simply achieved by pressing a function key. Telesoftware is simple to download — just select the first page of the programme, press the telesoftware key and respond to the query about file type. After the programme is downloaded you are returned to the Service Provider's software index.

The pamphlet describing the use and operation of the adaptor is clear and concise although I would have preferred the use of actual detailed examples when describing the use of the function keys.

The Commodore VIATEL adaptor provides a fast and easy way of accessing VIATEL, using the Commodore C64 and C128 computers.

The recommended retail price of the adaptor is \$299.

PORTABLE VIDEOTEX ACCESS FROM SYSCORP

With the wealth of information now being made available on Viatel, videotex is becoming to Australian business an almost indispensable tool. For many professionals, access to Viatel is of growing importance, and for them, ensuring round the clock reliable access to Viatel is essential to provide them with sufficient information to allow them to do their job. To solve this problem of access, Syscorp Microsystems and Tower Business Equipment have combined hardware and software into a bundle that, as long as there is a telephone available, allows a user to connect to Viatel. The solution centres on Syscorp Multicom, Syscorp Microsystems videotex package and the Toshiba T1100 lap computer. At a very light 4 kilograms, the T1100 is small enough to fit with an acoustic coupler, into an average sized briefcase. In fact the T1100, Multicom, acoustic coupler and briefcase all come bundled together from the distributors, Tower Business Equipment Pty. Ltd. and Syscorp Microsystems.

Centred around low power consumption CMOS technology and a 16 bit 80C88 processor chip, the T1100 has inbuilt rechargeable batteries which give up to 8 hours use between charges. Its LCD screen has a 640 x 200 pixel resolution and can display a full 25 line x 80 columns screen of character data.

The user loads Multicom on to the T1100 by its built-in 3.5 inch floppy disk drive, which has a formulated capacity of 720 kilobytes. Once the disk is inserted the user merely keys 'MULTICOM' and is then presented with Multicom's novel split screen layout. On the right side of Multicom's screen are function key command explanations, while the left side initially displays simple dialling and connection instructions to allow the user to connect easily to the database. Multicom can automatically log-on to connect to Viatel with a stored log-on sequence which can enter the user's identification number and password. With this automatic log-on ability, user involvement at the criti-

cal log-on stage is minimised thus saving time and effort. As well the user does not have to memorise long strings of digits, these can be stored and recalled by Multicom.

Multicom turns an IBM-PC (or compatible), T1100, ACT Sirius or Apricot PC/XI into a fully featured videotex terminal or glass teletype emulator. Multicom is widely used by major Viatel service providers; Moneywatch, the Commonwealth Bank's Telebank, the telesoftware service — Microtex 666 and the merchant bank Dominguez Barry Samuel Montagu.

Syscorp Microsystems has bundled Multicom with the T1100 to increase its availability to those who need a truly portable videotex terminal with the added flexibility of being IBM PC compatible. According to Chris Liddell, marketing manager for Syscorp Microsystems,

"our research has shown that a need exists to provide professionals, especially in the financial world, with portable Viatel access."

These people tend to work around the clock and need to connect to Moneywatch for example, whether they are at home, work or in a hotel. 'Liddell said it makes good sense to have Multicom running on a T1100. Multicom has interfaces to popular PC packages such as DBase II/III and Lotus, and since the T1100 can run such software, information from Viatel can be downloaded and manipulated. A typical scenario would be an investor downloading financial information from Moneywatch or Telebank into a Lotus model for further analysis. As well as allowing access to Viatel, Multicom can communicate with other network services such as OTC's Midas and Minerva



networks, and Telecom's Telememo. Multicom also supports telesoftware download, such as is available through Viatel on the Microtex 666 service.

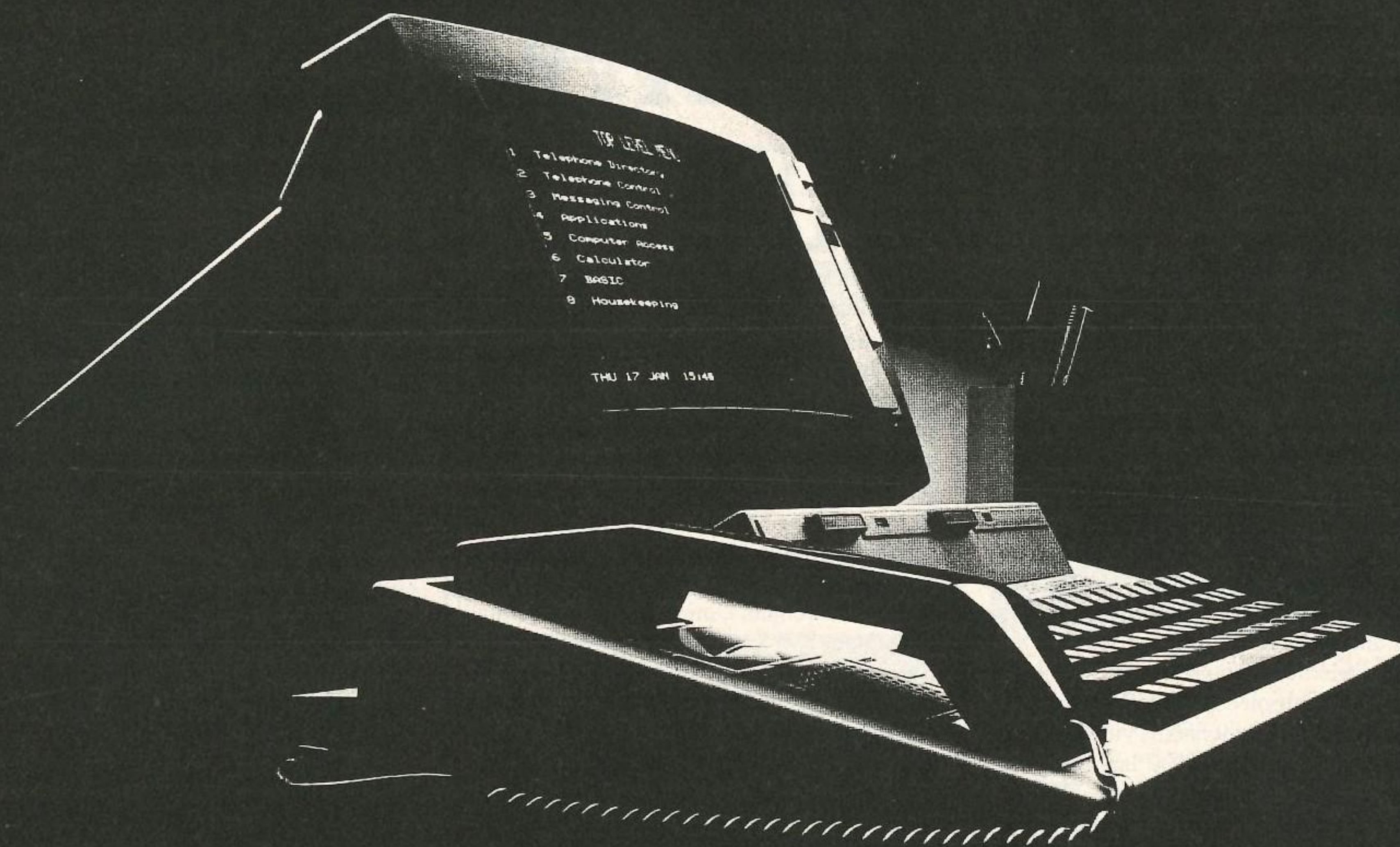
The T1100 has standard peripheral interfaces, including a parallel printer port for dumping Viatel screens to hardcopy. An extra floppy disk drive can be attached to provide an additional 720 kilobytes of storage. One of Multicom's more powerful features is its command file system allowing automatic execution of stored sequences of commands. This could allow the user to log-on to Viatel, send a message (previously created using Wordstar), access a series of stock prices and store them to disk, disconnect from Viatel and dump the stored prices to hardcopy. All of this automatically.

Multicom's user-to-user mode also allows remote PC to PC communication. With both PCs running Multicom, keyboard to screen connection as well as file transfer between systems with full error detection is possible. Using CET protocols both binary and ASCII files may be transferred.

The Multicom/T1100/modem bundle is available from Tower Business Equipment Pty. Ltd. and Syscorp Microsystems Pty. Ltd. for a price of \$3,999.



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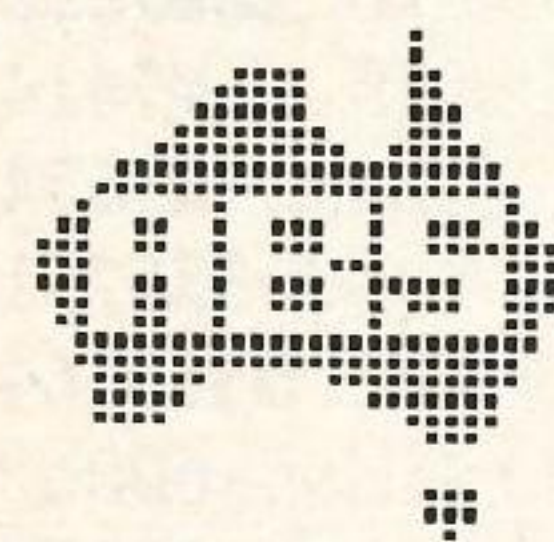
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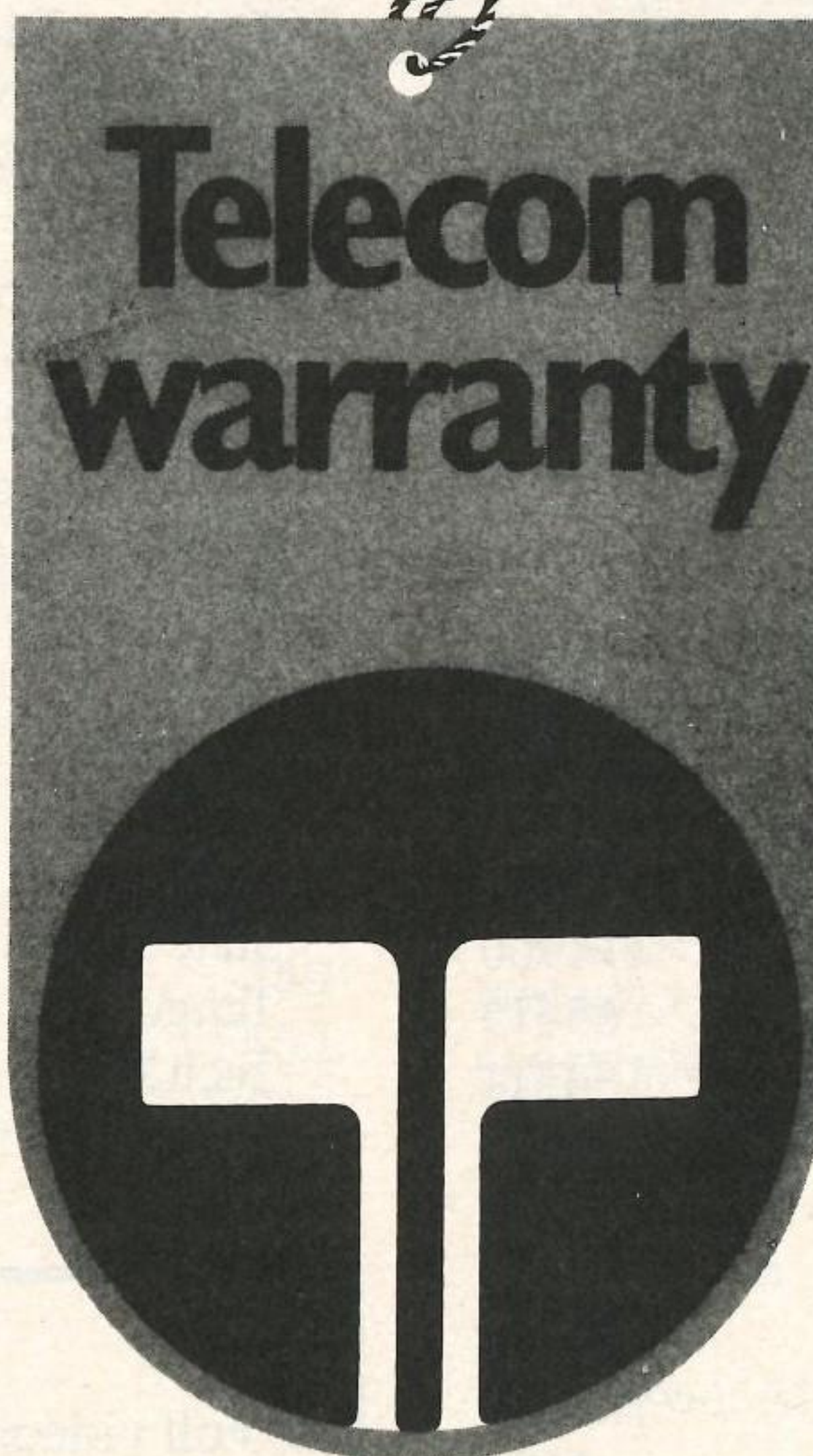
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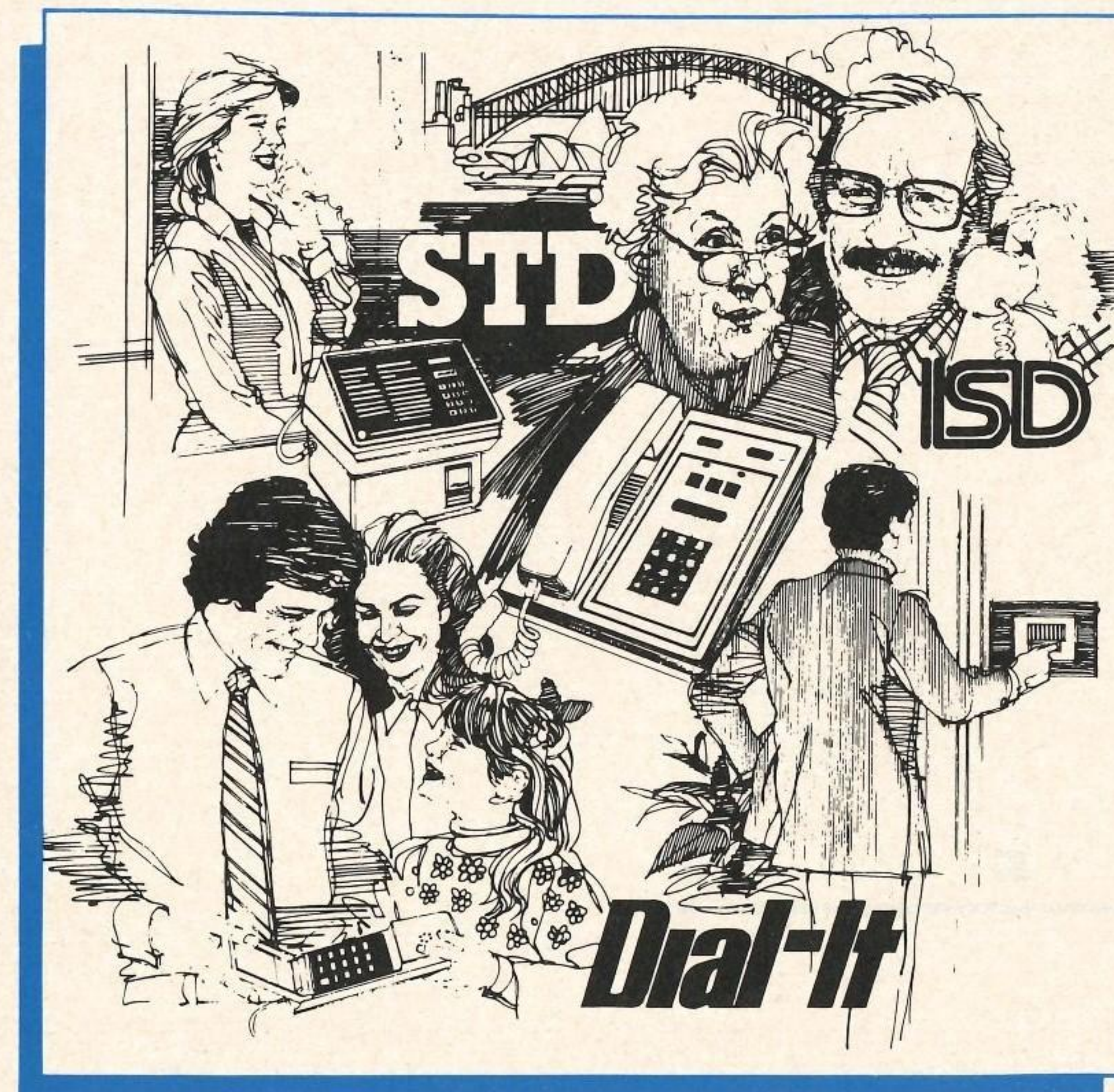
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us infor


SUBJECT INDEX

ISSUE 4 • 1986

This is the subject index of what is available on Viatel. Use this to find out the various service providers available in each subject.

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Tasmania

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Your holiday destination

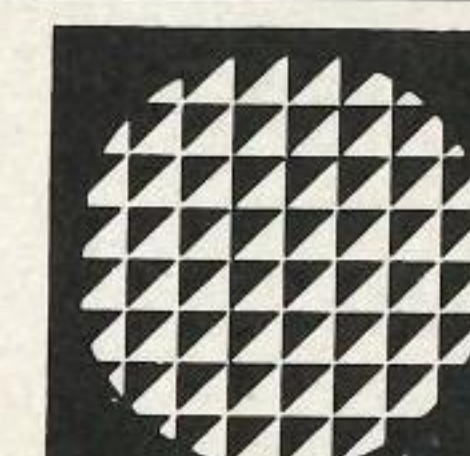
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- provide creative design for information display
- provide staff training in videotex procedures
- research and develop gateway connections to your organisation's computer systems
- provide a gateway bureau system.

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YELLOW PAGES 444a oc

Key 1 for Main Index

TELECOM YELLOW PAGES

0 for Viatel

The service is under development
and is open for inspection
on Viatel node *444#

IF YOU KNOW THE NAME, KEYWORD SEARCH WILL FIND THE MAILBOX NUMBER.

Keyword Search is the
easy way to find Viatel numbers.

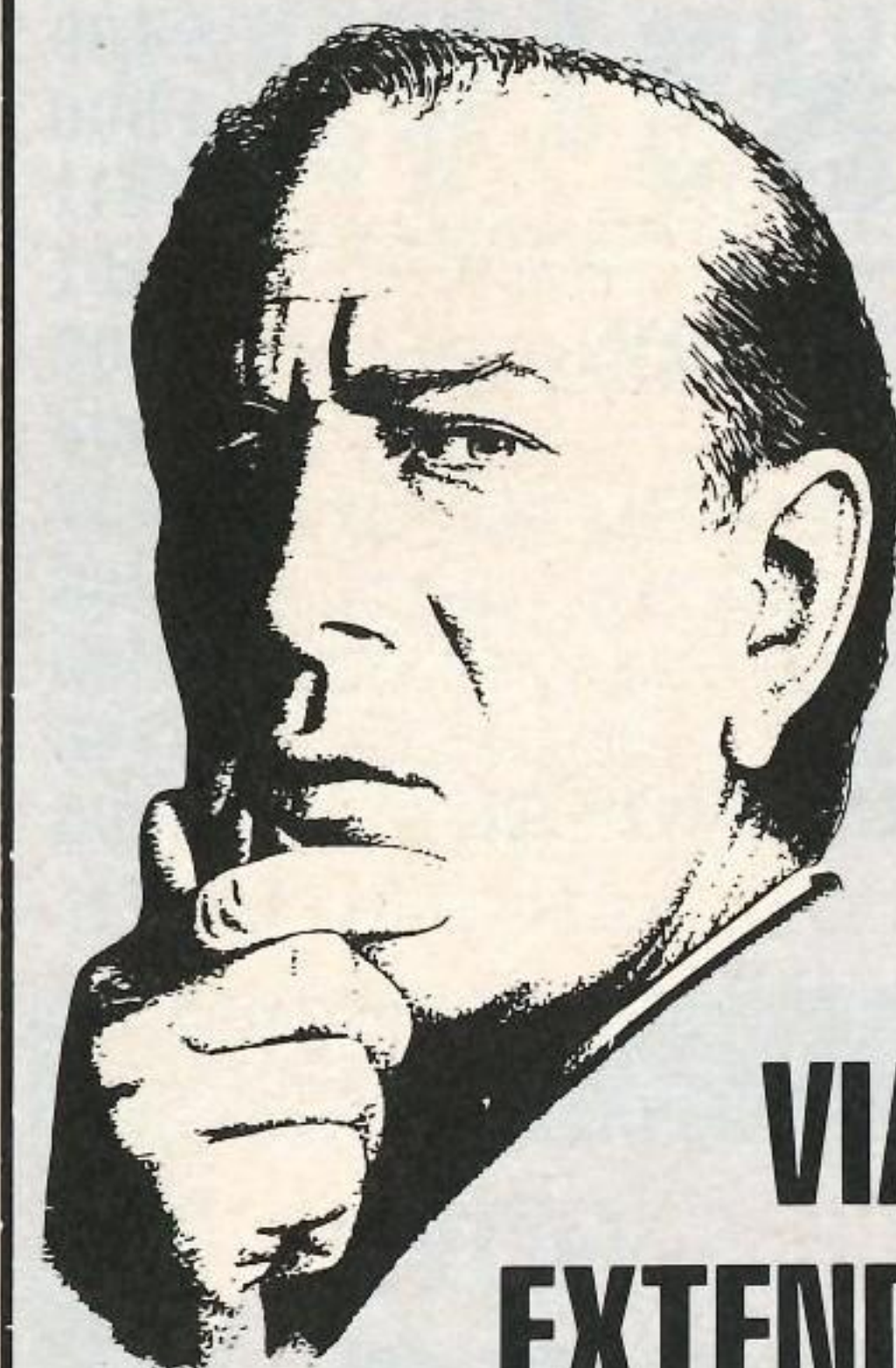
All you have to do is key in
the name of the person you
want to send a message
to, and Keyword Search
does the rest.

A great time-saver. Try it
the next time you want to send
a mailbox message.

Key*10351#



WHAT HAPPENS



**TO YOUR
VIATEL
MAIL
IF YOU
DON'T USE
VIATEL FOR AN
EXTENDED PERIOD?**

A number of users have asked us this ques-
tion and we thought the answer would be
of general interest.

As long as you use Viatel at least once
every 3 months your mailbox messages are
always held by Viatel. However, if you don't
use Viatel at all for more than 3 months
you can be placed in the category of
suspended user. This results in all your
existing messages being cancelled and
you will need to let us know when you wish
to start using Viatel again.

This action is taken as part of Viatel's
security procedures.

In the next issue of this magazine we will
be starting a regular column where we
will answer some of the most frequently
asked questions about Viatel.

APPLICATION FORM

(BEFORE COMPLETING THIS APPLICATION, PLEASE READ REVERSE SIDE CAREFULLY)

DATE OF APPLICATION / /

section 1

PLEASE TICK APPROPRIATE BOX TO INDICATE SERVICE REQUIRED

BUSINESS SERVICE ☐

NON-BUSINESS SERVICE ☐

(CHARGES INCURRED ON BUSINESS SERVICES ARE USUALLY TAX DEDUCTIBLE)

SURNAME (OR BUSINESS NAME IF BUSINESS SERVICE)

GIVEN NAMES

POSTAL ADDRESS NUMBER/STREET

SUBURB/CITY

STATE

POSTCODE

TELEPHONE NUMBER ON WHICH SERVICE IS REQUIRED (INCLUDING STD CODE)

section 2

CONTACT NAME (IF BUSINESS SERVICE)

GIVEN NAMES

POSTAL ADDRESS FOR BILLING IF DIFFERENT FROM SECTION 1 ABOVE
NUMBER/STREET

SUBURB/CITY

STATE

POSTCODE

CONTACT TELEPHONE NUMBER (INCLUDING STD CODE)

section 3

PLEASE DESCRIBE NATURE OF BUSINESS (OR OCCUPATION IF NOT A BUSINESS SERVICE)

PLEASE INDICATE TYPE OF EQUIPMENT USED TO ACCESS VIATEL

special instructions

THIS FORM SHOULD BE HANDED IN AT ANY TELECOM BUSINESS OFFICE OR MAY BE
MAILED WITHOUT A STAMP TO FREEPOST 20, VIATEL BOX 188C, GPO MELBOURNE,
VICTORIA 3001

PLEASE ALLOW TEN WORKING DAYS FOR PROCESSING OF APPLICATION AND RETURN
MAIL ADVICE.

telecom
use
only

DTE

PP

VN

BG

SC

CI

REF

REGISTRATION AND SUBSCRIPTIONS

Customers must register as a Business Service if the telephone number nominated for the use of the VIATEL Service is a Business Service and/or VIATEL is to be used wholly or mainly for Business, Commercial, Industrial, Professional or Government purposes. (Charges incurred on Business Services are usually tax deductible.)

Where a Business Telephone Service is nominated for the use of VIATEL, but the use of VIATEL is wholly or mainly for Non-Business purposes, the Customer may be registered as a Non-Business VIATEL subscriber, providing the registration is taken out in the Customer's personal name and address and not a Business name.

Telecom Australia will register the Business or Individual named under Section 1 as a Customer of its VIATEL Service and will provide the Customer with a confidential Customer Identity Number and Personal Password by mail.

Where billing address is indicated, bills and bill related correspondence ONLY will be forwarded to that address. All other correspondence will be forwarded to address under Section 1.

Customers should advise VIATEL of any change of address as soon as possible.

If you lose your Customer Identity Number and/or Personal Password, you must advise VIATEL in writing before new numbers are issued. Our postal address is: Freepost 20, Box 188C, GPO Melbourne, Vic. 3001. FOR SECURITY REASONS REPLACEMENT NUMBERS AND PASSWORDS CANNOT BE PROVIDED OVER THE TELEPHONE.

Customers of VIATEL acknowledge that their name and registered VIATEL Number will appear on the VIATEL Mailbox Directory and that Service Providers and/or other registered VIATEL users may send messages to their VIATEL number.

Telecom Australia undertakes no responsibility in relation to the accuracy of the information or service provided by Service Providers on VIATEL. Telecom Australia will not be responsible for any loss or damage arising out of or in any way connected with the use of this information or service.

Attention is also drawn to the terms and conditions governing the provision of information and services by some Service Providers. These terms and conditions may, in some cases, include a disclaimer absolving the Service Provider from liability regarding information and services supplied on VIATEL. The means of accessing these terms and conditions is set out on the Service Provider's Index Page on VIATEL.

Should you require any changes to your existing telephone equipment (e.g. new exchange line, additional socket), please contact your local District Telecom Office.

In a small number of cases VIATEL reception may be unsatisfactory. Correction may incur an additional charge.

USING VIATEL

DETAILED INSTRUCTIONS

WHAT IS VIATEL?

Viatel is Telecom Australia's public videotex service. It allows you to access large stores of useful information merely by pressing keys on a small keypad. The information is fed to your office or home via the telephone line, and displayed in colour on a television screen or a special colour monitor.

Most of the information on Viatel is supplied by Service Providers (SPs) who are responsible for deciding what they put on Viatel and how they present it.

Telecom Australia is responsible for operating Viatel; it makes space available to SPs, and provides the indexes which allow users to find the SPs' information. Viatel users should note that Telecom Australia does not guarantee the accuracy of the information or service provided by Service Providers, nor accept responsibility for any loss or damage arising out of or in any way connected with the use of this information or service.

BECOMING A VIATEL USER

If you are not already registered with Telecom as a Viatel user, you should telephone or visit your local Telecom Business Office. These are listed at the front of your telephone directory. Viatel requires a telephone line connection to enable you to link up to the Computer Database. In most instances an existing standard telephone service is all that is required. However, in a small number of cases Viatel reception may be unsatisfactory. Upgrading of your telephone service to ensure quality data reception may be necessary, and this may incur an additional charge.

Your Telecom Business Office will be happy to give you information

about the Viatel service and about various kinds of Viatel equipment.

Contacting Viatel

Once you are a registered Viatel user, it is important for you to contact your Telecom Business Office or the Viatel service if you are changing your address or telephone number, or if you no longer want the Viatel service.

You can contact the Viatel service directly to advise them of any changes by keying *105 # on the system.

ACCESS NUMBERS AND PASSWORDS

When you become a registered Viatel user, you are given a series of access numbers and passwords to allow you to use the system. It is important for you to distinguish between them:

Viatel Number:

This number is rather like your Viatel "address". It is used when others want to send messages to you over the system, and it is the number you should quote if you need to contact Viatel about your bill or any other matter.

To find out your number
Call Viatel
Key *1012 #

We suggest you look it up as soon as you have read the section on CALLING VIATEL, note it on a label, and attach it to your set. Don't confuse this number with your Customer Identity (see below).

Customer Identity

Every customer has a unique 10-digit Customer Identity. You are given your Customer Identity by letter when you register with Viatel. It is confidential, so keep it safe. You will need it, and your Personal

Password (see below) to access Viatel. It also identifies you to Viatel for charging purposes, so remember —

IF YOU LET ANYONE ELSE USE YOUR CUSTOMER IDENTITY, YOU WILL BE CHARGED FOR THEIR USE OF VIATEL.

Personal Password

Viatel customers are allocated a 4-character Personal Password when they register with Viatel. You are notified of it by letter at the time of registration. Like your Customer Identity, it is confidential and should be kept safe. It is extra security against anyone using Viatel in your name without your permission.

You can change your Personal Password as often as you like simply by keying *920 # on Viatel. Instructions on the screen will tell you what to do. You should change your Personal Password the first time you use Viatel.

Remember:

- A Personal Password can consist of any 4-character combination of letters (capitals or lower case) and numbers.
- If you lose your Personal Password, write to Viatel. Our address is:
Free Post 20,
VIATEL,
Box 188C,
GPO Melbourne 3001.
You will not be able to use Viatel again until they have replied in writing. (Personal Passwords will not be divulged over the phone.)

YOUR SET AND THE VIATEL COMPUTER

There are some things you need to know about your set, and about the way it links up with the Viatel computer.

There are various kinds of sets: special Viatel sets, ordinary TV sets with Viatel adaptors and personal computers with a 1200/75 modem and appropriate software. Each has its own operating instructions. Many sets will automatically dial the Viatel telephone number for you, and some will also transmit automatically your Customer Identity number.

Whichever kind it is, your set must have a Telecom Authorisation Number, before it can be linked up to the Computer via the telephone network.

Before you start using Viatel

- Read the operating instructions for your set.
- Contact the supplier if anything in them is not clear.
- If your set has an auto-dialler, check that this has been programmed with the correct telephone numbers. Usually sets allow you to do this yourself, if you have any difficulties contact your dealer.
- Make a note of the auto-dialler codes; we suggest putting them on a label and attaching it to the set.

When you are using Viatel

- Contact your set supplier if you are having trouble which you think is due to your equipment.

CALLING VIATEL

- 1 Switch on your Viatel set.
- 2 If your set has auto-dialling, key the code for Viatel and the set will dial the number for you. Otherwise, key in 01955 and await connect of your call. If your set is suitably equipped and programmed, it will automatically enter your Customer Identity number once it is connected to Viatel. Otherwise, key it in carefully yourself when it is required by Viatel.
- 3 Enter your Personal Password when it is requested and wait for

the Viatel Welcome Page to appear on the screen.

If you can't get the Viatel Welcome Page:

- Make sure no-one is using the telephone associated with the set.
- Make sure the telephone connection is pushed right in.
- If your keypad is connected to your Viatel set by cable, make sure the cable is properly plugged in.
- Switch off the set or switch to TV mode if it is available to check reception.
- Switch on again.
- Follow CALLING VIATEL steps 1-3 again very carefully.

If you still can't make the connection to Viatel:

The fault could be in three areas:

- Your Viatel set;
- The telephone line;
- The Viatel Computer.

To test where the fault may lie, check that your telephone line is still capable of operating correctly for ordinary telephone calls. If not, use another phone and call Service Difficulties on 1100.

If your Viatel set is capable of receiving broadcast TV, try out a normal broadcast channel. Refer to the operating manual for your set and check for any problems. If there is a fault, contact the supplier of your set.

If both set and telephone line seem to be all right on their own, again attempt to call Viatel. If difficulties persist contact Viatel Assistance and Difficulties by dialling 008 033344 (local call fee).

FINDING INFORMATION

There are a number of different ways of locating information on Viatel. You will use different ways for different purposes.

Through Viatel itself

- Keying through index choices:

Starting with the main Viatel index (key *0 #), you can simply follow the choices listed on each page, working towards more and more specific information. This may be a slow way of reaching a particular topic, but useful if you want to "browse" to see what information is accessible.

- Using the Viatel Subject Index: An extensive alphabetical list to subjects is maintained on Viatel itself. Key *13 # and follow the instructions on the screen. You can find the name of the subject you want in a few simple steps and then key one or two numbers to go direct from there to the index page for Viatel information on that subject.
- Using the Viatel Service Provider Index: Also listed on Viatel are all of the Service Providers presently putting information on the system. Key *13 # and follow the instructions on the screen. This enables you to find the name of the Service Provider in an alphabetical list, and then go direct to that Service Provider's "front page".

Through The Directory

The Viatel Printed Directory also contains alphabetical lists to subjects and to Service Providers. It cannot be updated as quickly as the on-screen Viatel indexes, but more detailed information can be provided, and it enables you to quickly find the right page number for the subject or Service Provider you want to find, before you even connect up to the Viatel service.

Using the printed Subject Index: Find the name of the subject you are interested in, in the alphabetical list of subjects. Note the page number or numbers you are interested in. Then call Viatel, and once you reach the Viatel

welcome page, key *page number # to go straight to the subject you want. If you want to go to a second subject, again key *page number # for the subject.

Using the printed Service Provider index:

Similarly, look up the Service Provider or Providers you are interested in, note down the numbers, call Viatel, reach the Welcome Page, and then key *page number # to reach the front page of the Service Provider you want.

Charged Pages

Remember: Some SPs make a charge for some pages of their information.

- For a full explanation of how Viatel is charged for; see PAYING FOR VIATEL.

If keying a particular number on any page will lead you to a page for which a charge is made, the charge is shown like this:

- News headlines at 10.00 am 5 cents
- Today's company results Market report at 11.30 am 20 cents
- Industrial Ordinary index 10 cents

so that you can choose whether you want to see it and pay.

If you do go on to request the charged page, the charge is shown in the top right-hand corner. Free pages have 0 cents in that position.

That's all there is to normal use of Viatel.

EXITING VIATEL

When you want to leave Viatel:

Key *90 #.

This will automatically end your call to Viatel, unless there is a Mailbox message waiting for you. If there is a Mailbox message for

you, a note telling you how to see it will appear on the screen when you key *90 #.

- If you want to see the message, key *930 #.
- Follow the instructions on that page, then either key *0 # to continue on Viatel or *90 # to leave.
- If you don't want to see the message key #, and that will automatically end your call to Viatel.

Other things that may end your call

A call to Viatel will be automatically ended without your intending it if:

- Power to your Viatel set is interrupted (for example by an electricity breakdown).
- Someone switches off your Viatel set.
- The phone call from your set to the Viatel computer is disconnected.

If your call ends like this, check the reason, and if you want to go on with your call, start again and call Viatel according to the instructions under Calling Viatel.

PAYING FOR VIATEL

There are four basic elements to the charges for Viatel.

- 1 A Viatel subscription fee (introductory discounts apply to 1st March 1986)

Business \$12.50 per month
Non-Business \$ 2.50 per month

- 2 The cost of a local telephone call to be connected to the Viatel computer from any location in Australia (this charge will be displayed in the top right hand corner of the 'Welcome to Viatel' frame and appear on your Viatel bill as part of the frame access charge)

- 3 A charge for the time spent connected to the Viatel computer

Monday-Friday
8 a.m.-6 p.m. 8 cents per minute (Eastern Standard Time)

At all other times 5 cents per minute.

- 4 A frame access charge where applicable. This charge is set by the provider of the information and is collected by Telecom on behalf of the Service Provider.

You will receive a separate bill for the charges incurred using Viatel at regular monthly or quarterly intervals.

Checking your charges as you use Viatel

Any time you are connected to Viatel you can: key *92 #

The screen will show you:

- Total usage charges for this call
- Total usage charge for the current month

Enquiries

Billing enquiries should be directed to the contact point shown on your bill under 'Enquiries'.

Getting value for money from Viatel

There are some simple ways of making sure that you get the most out of Viatel.

- Use your set after 6 p.m. and at weekends to take advantage of cheaper rates.
- Get to know the different ways of looking for information, and choose the most appropriate one each time you use Viatel.
- Cut down the time your set is connected to Viatel by looking up the pages you need in the printed Directory and going

straight to them when you do call Viatel.

- Make your own list of pages that you use frequently.
- Always check before you make a choice from a screen index if there is a charge for the page you think of going to, so that you are charged only for the pages you really want to see.
- Get to know the special features of your own set which can save you costs. Study the instructions with your set, or consult your supplier. You may, for instance, be able to disconnect your set from the Viatel computer, while keeping the page you are looking at on the screen.

SPECIAL VIATEL FEATURES

Response frames

The response frame is a special kind of Viatel page which allows you to send a message to the Service Provider who has put the response frame on Viatel — for example, you can use it to order goods, or to make reservations. To use a response frame, follow the instructions on the frame.

Mailbox

Mailbox is a facility which allows Viatel customers to send messages to each other.

To send a Mailbox Message.

- Check the Viatel number of the person to whom you want to send it:
key *1035 # for the Mailbox Directory.
- Select the appropriate Mailbox frame for your message:
key*103 # to see the types available.
- Key the number alongside the type you need; it will appear on the screen ready for you to fill in.
- Key the Viatel number of the person to whom you are sending

the message; after the number key #.

- Fill in the other parts of the frame according to the instructions; end each part with #.
- When the message is complete, you are given the choice of sending it or cancelling it (in case you have made any mistakes and want to start again).
- Key the number for whichever you wish to do.

To see if there are Mailbox messages for you:

- Key *930 #
You will also be told if there are Mailbox messages for you when you connect or leave Viatel. (See Exiting Viatel above.)
- To store messages so that they can be looked at again:
- Instructions for storing appear on line 24 of Viatel page *930 #.
- Key *931 # to see stored messages again.

Private Pages

In looking for information, you may be informed by a message on the screen that the page you have asked for is a Private Page. This is a page which is not available for public viewing and may be seen only by members of a group set up by the Service Provider (a Closed User Group or CUG).

Gateway

Gateway gives you access to information which is held on a computer belonging to a Service Provider.

To see an index of Gateway SPs:

- Key *103591 #.

Using Gateway:

- Go to the SP's first page, which will give you a route to the first Gateway page.

Follow carefully the instructions

which appear on the screen. Some of them are different from the normal Viatel instructions, so you need to pay particular attention. A list of the codes for using Gateway is given below.

Remember:

There may be some delay before you see the information you require on Gateway. This is because the Viatel computer has to pass on instructions to the SP's own computer, and that in turn has to find and send the required information back to the Viatel computer.

- Wait until you receive the page you want before keying any more codes.

Gateway 'data collection' pages:

These are like Viatel response frames; they allow users of Gateway to send information to Gateway Service Providers' own computers. Data collection pages have separate parts which you fill in by keying appropriate numbers.

Telecom Australia undertakes no responsibility in relation to the accuracy of the information or service provided by Service Providers on VIATEL. Telecom Australia will not be responsible for any loss or damage arising out of or in any way connected with the use of this information or service.

Attention is also drawn to the terms and conditions governing the provision of information and services by some Service Providers. These terms and conditions may, in some cases, include a disclaimer absolving the Service Provider from liability regarding information and services supplied on VIATEL. The means of accessing these terms and conditions is set out on the Service Provider's Index Page on VIATEL.

USEFUL CODES AND PAGE NUMBERS

Assuming that you are now properly connected to Viatel and have received the Viatel welcome page, there are a number of useful codes that you will need to use. Here is a basic list of the codes that you use on Viatel and some of the main page numbers that lead to useful information.

USEFUL PAGE NUMBERS

Information

Viatel number *1012 #
Alphabetical index of SPs ... *13 #
Alphabetical index of subjects *13 #
Bill information
(Current usage charge) ... *92 #
Business Information *11 #
Complaints
& Compliments *1052 #
Main index *0 #
Mailbox *103 #
Personal Password *920 #
How to use Viatel *199 #
Viatex
(Telex Interface) *1036 #
What's New on Viatel *123 #

USEFUL CODES

Operation

From an index page

To get directly to any page from any page

To get back to the page you last saw

To correct a mistake in keying a page number:

if you haven't yet keyed =

if you have keyed =

To repeat the page that's on the screen.

Use this if a message saying 'Line noise' appears on the page.

There is no extra charge if it's a charged page.

To repeat the page that's on the screen, with any updates to it that may have been made while you have been viewing it.

To leave Viatel:

If there are new messages for you (see Mailbox) this page will tell you. If not, your call to Viatel will end.

Key:

The number or numbers of the choice you want to make.

*page number #

* #

you can use this 3 times in succession on any one occasion.

**cancels the mistake and you can start again.

When you get the page you called by mistake, just key the right number.

*00

*09

If it's a charged page, you'll be charged for it again.

*90 #

CODES FOR GETTING AROUND GATEWAY

Operation

Choosing from an index

To get from any page to any page.

To repeat the page that's on the screen.

To repeat the page on screen, with updates.

To go back to the page you last saw.

To correct a mistake in keying a code.

To leave Gateway and go back to ordinary Viatel.

To leave the SP's computer to which you are connected.

Key

Number alongside your choice

*page number #

*00

*09

* #

Not all SP's own computers allow this; if they don't, keying * # just gives you the same page again.

**

*0 #

This gives you the main index; then you can go on using Viatel in the normal way.

*02

This gives you the SP's 'goodbye' page.

IF YOU KNOW THE NAME, KEYWORD SEARCH WILL FIND THE MAILBOX NUMBER.

Keyword Search is the easy way to find Viatel numbers.

All you have to do is key in the name of the person you want to send a message to, and Keyword Search does the rest. A great time-saver. Try it the next time you want to send a mailbox message.

Key *10351 #



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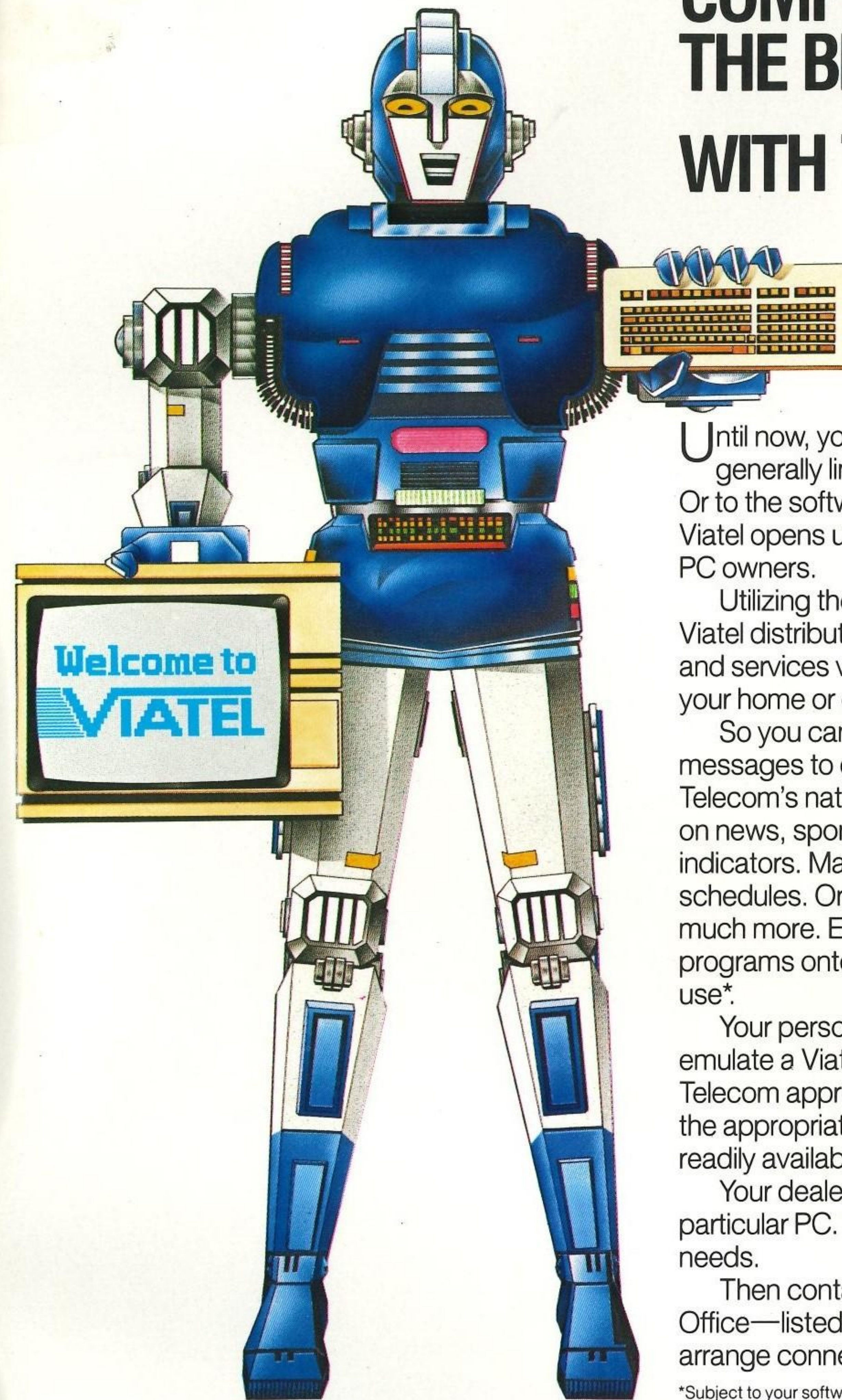
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Until now, your personal computer was generally limited to your information input. Or to the software available. Now Telecom Viatel opens up a whole new world for PC owners.

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So you can bank from home. Send messages to other Viatel users. Access Telecom's national Telex network. Get updates on news, sport and weather. Follow economic indicators. Make bookings. Check airline schedules. Order goods. Play games. And much more. Even download new computer programs onto disk or cassette for your own use*.

Your personal computer can be adapted to emulate a Viatel terminal. All you need are a Telecom approved 1200/75 baud modem and the appropriate software. These are now readily available for most PC's.

Your dealer will know what is best for your particular PC. Talk to him first about your needs.

Then contact your local Telecom Business Office—listed in your Telephone Directory—to arrange connection to Telecom Viatel.

*Subject to your software configuration.

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For one whole weekend, 1¢ per minute is all you pay for access time on Viatel.

That's right, just one cent a minute to access Viatel. For one whole weekend. To find out which weekend, just log on to page *3# on Viatel now.

Then you can spend two days browsing through Viatel, paying only 20% of the normal access time rate. Checking out the many new Service Providers. And keeping up with the greatly expanded services of existing Service Providers.

Remember, you still pay the local call fee for connection to Viatel. And for charged pages. But for that one whole weekend, your access time costs just one cent a minute. Make sure you take advantage of it.



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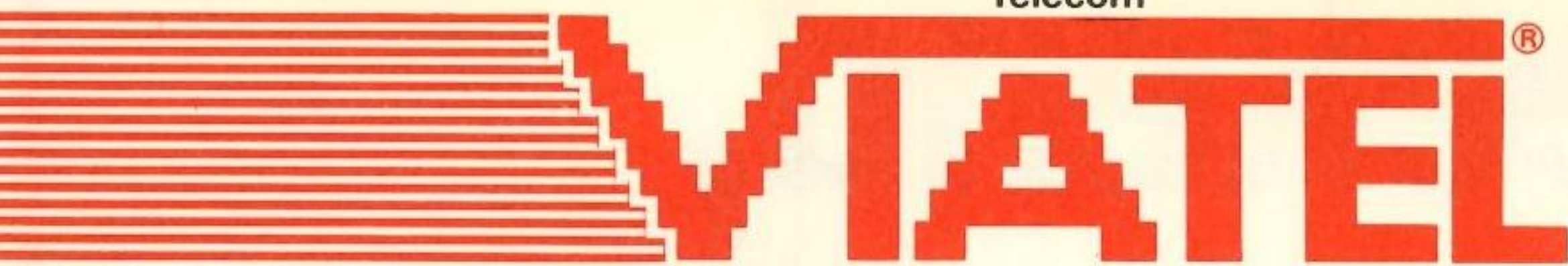
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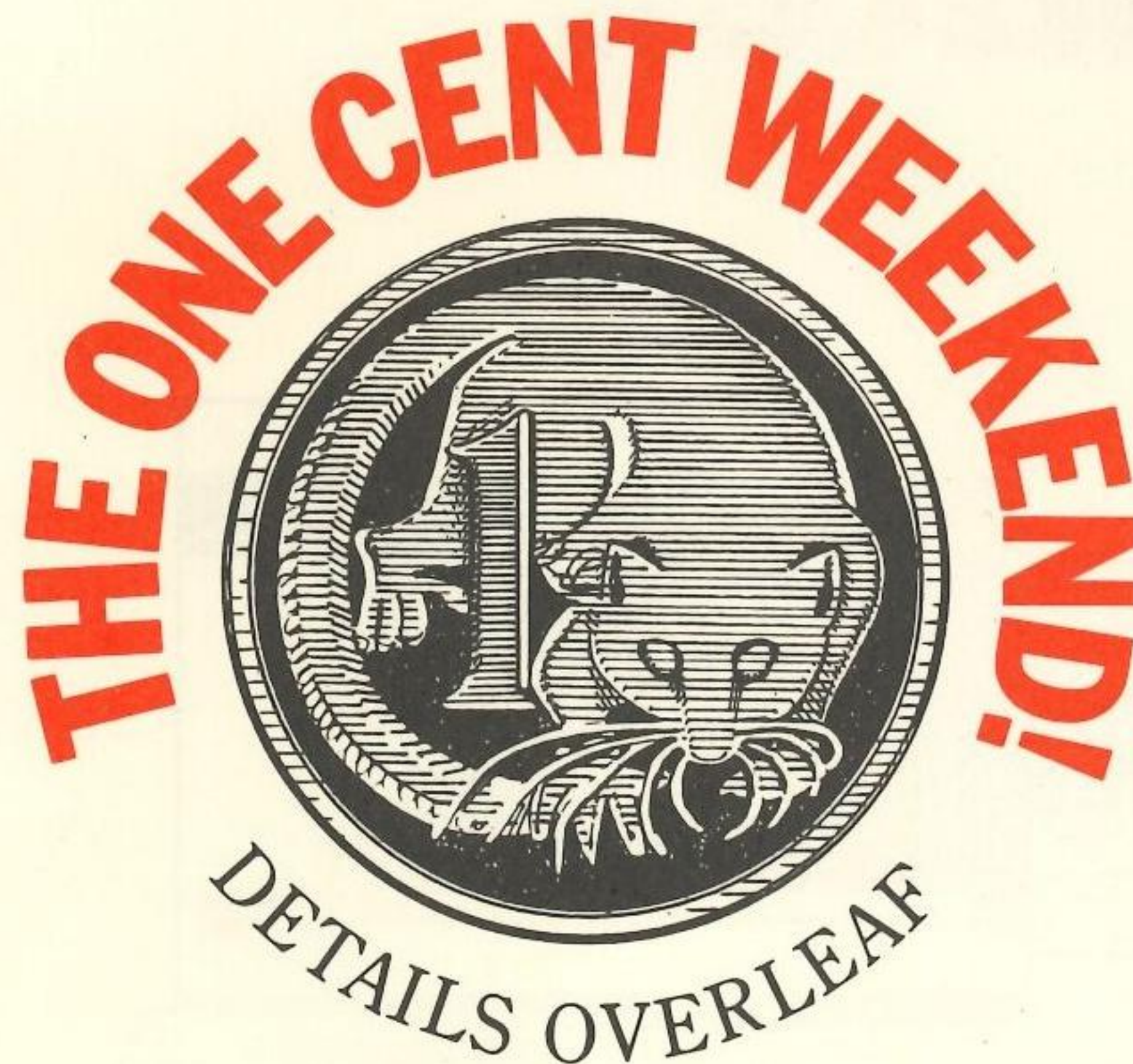
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